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Textile World

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Employer-Union Cooperation

NO MATTER how much individual groups may resist the theory of labor-extension, its application in the textile industry is only in its infancy. It must be counted as one of the major movements which promise to establish textile manufacture on a fundamentally sound basis, from the standpoint of both employers and employes.

Consequently, it behooves manufacturers and unions to study carefully each instance of successful adoption of the plan.

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An outstanding case has been that of the Pequot Mills of the Naumkeag Steam Cotton Co. at Salem, Mass.

We have been following developments at that plant with profound interest. We realize that Naumkeag started with certain definite advantages.

First of all, the company had a background of healthy industrial relations, of mutual confidence between management and workers. When differences finally arose, emotionalism was not allowed to run rampant. Despite the fact that Agent J. Foster Smith has been connected with the mills for 52 years, during most of which time the union was not recognized, he did not let traditional prejudices stand in the way of solution of those differences.

Second, the company has maintained its equipment at a high level of efficiency, and has constantly improved its working conditions.

Third, it was fortunate in having in John P. O'Connell, secretary of the Salem local of the United Textile Workers Union, the type of man with whom it could cooperate.

Consequently, it was natural that its experiment in the field of research work, participated in jointly by management and union, should have progressed successfully to the stage where a definite agreement was reached, promising higher wages and broader profits.

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The lesson, for both manufacturers and unions, is an obvious one.

To the latter, we recommend a study of the attitude of Mr. O'Connell. When we talked with him about the Naumkeag plan, he continually referred to "our" plant, "our" equipment, "our" product. He spoke as if he were one of the stockholders of the company, and not as an antagonist. Throughout the cooperative research effort, he and his local have been striving to help Naumkeag make a better product—and to find broader outlets for that product. Until other union representatives adopt that attitude, there will be few such examples of successful group activity. Quite frankly, we feel that the United Textile Workers Union has been making the Naumkeag proposition a "show case"—a sort of "window dressing." Instead, it must regard it as a yard-stick for future attempts to cooperate with employers.

To manufacturers, we recommend a study of Mr. Smith's attitude. He recognized the fact that labor extension was a twofold problem—an engineering and a psychological one. He knew that no worth-while results could be achieved unless machinery and plant management were at the maximum level of efficiency; and unless every individual, down to the sweeper, understood that the end-point was not solely larger profits for the company nor solely higher wages for the workers, but a fair combination of both.

Without such an approach to the problem, on both sides, employer-union cooperation is merely an idle dream.

The Week in Textiles

Outlook . . .

ALTHOUGH RAW material markets reacted more or less in sympathy with securities, taking a big tumble this week, and volume of sales in the majority of textiles suffered in the confusion, there were a few bright spots. . . . General relief was felt over the final disposal of the tariff question. . . . Warm weather stimulated sale of bathing-suits and light underwear and good re-order business for the season was anticipated. . . . Raw cotton dropped more than cent a pound and cotton goods were correspondingly weaker. . . . Raw silk prices were slightly lower, but wool and wool goods remained steady. . . . Slight improvement was observed in the hosiery market.

New Tariff In Effect . . .

PRESIDENT HOOVER, perhaps with certain misgivings, affixed his signature to the Hawley-Smoot tariff bill June 17 and that sizeable document, the fruit of nearly 18 months of labor in the Congressional laboratories, became effective at precisely 12.01 A.M., June 18. . . . Athough many of those who voted for the bill in its final form admitted that it contained numerous flaws, American business leaders, including several textile manufacturers, have voiced the opinion that the new tariff will not result in the economic disasters which were generally predicted by its opponents. . . . At any rate, now that the uncertainty of tariff legislation is no more, commerce and industry can remove one unknown quantity from present calculations.

Texas Association Meets . . .

NEED FOR closer cooperation in the industry was the keynote of the address by President H. A. Burow, of the Texas Textile Association, in its semi-annual meeting at Waco, Texas, June 13-14. . . . Officers for the ensuing year were elected, as follows: J. R. Compton, Gonzales, Texas, president; L. R. Manning, Waxahachie, Texas, and Ingram Lee, Dallas, Texas, vice-presidents; D. H. Poole, Sherman, Texas, secretary-treasurer.

Style Outmodes Machinery . . .

THE VITAL relation between style and machinery obsolescence is illustrated in the findings announced by the Department of Commerce, on its survey of knitted outerwear mills in Philadelphia. . . . . A committee of outerwear manufacturers, representing the National Knitted Outerwear Association who cooperated with the department in the survey, reported that, on a basis of 100% for the most efficient machines, 79% of the circular machines and 98% of the flat machines could not be rated at more than 20% for the type of work to which they were assigned. . . . . The department statement adds that changing styles in such items as sweaters and bathing-suits were responsible for most of the idleness in the plants examined. . . . . The great need for machinery which is adapted to the current mode was a chief topic discussion Thursday and Friday at the convention of the National Knitted Outerwear Association in Toronto. . . . . The outerwear men also gave much attention to the trade practice rules, as revised by the Federal Trade Commission which have been subject to considerable criticism. . . . Numerous factors contend the commission's alteration of the rules has practically invalidated them.

Textile Payrolls Shrink . . .

WOOLEN AND worsted manufacturing was the only industry of the textile group to register an increase in employment and swollen payrolls for May, as compared with April, while the carpet and rug industry suffered the greatest reduction in this respect, according to the Bureau of Labor Statistics. . . . . Employment in the cotton goods branch declined 3%, accompanied by a 4.5% reduction in total payrolls, while hosiery and knit goods establishments reported an employment decline of only 1.1% with decrease of 6.2% in payrolls. . . . . Woolen and worsted mills, on the other hand, enjoyed a 4.4% increase in employment and 9.5% addition to their total payrolls.

Rayon Gains in England . . .

CABLE REPORTS this week from Manchester, England, state that there has been decided improvement in British rayon trade recently, and that prospects for fall season are good so far as home trade is concerned. Courtauld's Ltd., has taken back many of their employes at the Coventry and Flint plants.

Cotton Consumption Off in May . . .

COTTON CONSUMED in the United States in May, according to the Department of Commerce's preliminary report, showed a marked decline as compared with the same month of last year. . . . May consumption was only 473,917 bales, almost 30% less than the figures for May, 1929, while cotton spindles active during the month declined from 30,937,182 in 1929 to 23,374,434, a drop of about 24%. . . . Exports of domestic cotton for the 10 months ending May 31 amounted to 6,329,322 bales as against 7,506,945 bales for the corresponding period last year.

Woolen and Worsted Statistics . . .

BASED UPON a preliminary survey by The Wool Institute, Inc., including 96.8% of the reporting looms in woolen and worsted industry, men's wear worsteds production showed an increase of 5% in May, with billings 13.4% above April. An increase of 15.9% shown in surplus stocks represents only two or three days' supply on the basis of current billings and is accounted for by increased accuracy in billings. . . . Women's wear worsteds for May showed an increase of 17.0% in production, and 7.0% in billings, while

stocks were reduced 6.9% as compared with April. . . . The production of woolens declined 9.5% in men's wear fabrics and 11.7% in women's wear, while the total production of all fabrics showed a decline of 2.6% in May.

Copyright Bill Delayed . . .

THE DESIGN copyright bill once more has been passed over by the House of Representatives. . . . When the measure came up on the calendar last week, objections were raised on the grounds that certain of the provisions in the bill are objectionable to organizations of retailers. While tentative agreements have been worked out over some amendments, there are other features of the bill over which there is still conflict. . . . If the bill is not acted upon the next time it is reached on the calendar, it is doubtful if it will become a law at this session.

Rail Rates Readjusted . . .

FREIGHT RATE increases of approximately 12½% to 25% on cotton goods and knitting factory products will become effective in North Carolina on August 2, as a result of a ruling by the Interstate Commerce Commission, bringing North Carolina rates up to the general level of the southern classification. . . . . It is the reported intention of certain railroads to reduce freight rates on shipments of textile goods from New England to the West and it is claimed by traffic experts of the southern manufacturers that such action would create a difficult situation for shippers of cotton goods in the South.

Catching the Banker's Eye . . .

THE TRADE association has become a permanent part of American business life, according to Hugh P. Baker, manager of the trade association department of the Chamber of Commerce of the United States, who spoke at the convention of the National Association of Purchasing Agents, Chicago, Ill., June 18. . . . "Conditions are such in industry today," he declared, "that if for any reason the association serving a particular industry were wiped off the map, in six months doubtless the industry would have to come together again for unified action in meeting its common problems. More and more the bankers are coming to determine the credit to be extended business men upon the basis of the ability of the business man to get together with his competitors for the sound upbuilding of the business or industry of which he is a part."

Seeks Leather Substitute . . .

WAR DEPARTMENT is on the side of research in the textile industry. . . . . Development of a substitute for leather in gloves and shoe soles is desired by the Quartermaster Corps. Impregnated cotton fabrics probably will be the basic materials. Special tensile and abrasing machines are expected to be developed by the Bureau of Standards for testing the substitutes. . . . . Wider range of colors in non-chromium dyes to meet all fastness requirements is also desired by the Army. The difficulty centers in getting fastness in wool in the non-chrome colors. The Bureau is endeavoring to enlarge the range of the non-chrome colors and at the same time perfect their fastness.

Increasing Curtailment . . .

ADDITIONAL MILLS in New Bedford and Fall River placed curtailment programs in effect this week, and it was estimated that production of fine goods for the balance of the year will show a reduction of 30% or more. . . . This week saw the closing down of the Parker Mills and King Phillip Mills, divisions of Berkshire Fine Spinning Associates, Inc., and Davis Mills, of Fall River; and the Butler Mill, Grinnell Mfg. Corp., Pemaquid Mills, and Pierce Bros., all of New Bedford. . . . . Several southern mills announced intentions of continuing their curtailment programs throughout the summer months.

Dark Shadows In British Trade . . .

IF THE FOLLOWERS of Ghandi have the fortitude to go through with their insurrection, which is quite doubtful, it will have a profound effect on British business and British consuming power. . . . Revolution in India would sorely injure the British textile industry, and it is felt that the United Kingdom would have to withstand a worse shock than the collapse of its foreign trade in coal. . . . Their trade in China has been hard hit also. Should the Indian business be cut off, its repercussions would be disastrous and would extend throughout the British Empire and to the United States as well.

Echoes of the Wool Industry Meeting

A MOST ENCOURAGING aftermath of the wool industry meeting held in New York May 28 is the increasing interest on the part of mill and selling executives in their own, and the industry's, statistical position. Questionnaire returns are running large.

The plan presented at the meeting by A. D. Whiteside, president of the Wool Institute, to use the institute merely as a workshop for the gathering, dissemination, and discussion of desired information, has the psychological advantage of bringing to the industry a feeling of its own responsibility. The attitude of sitting back and expecting wonders from the institute is no longer tenable. Charts which reveal the individual mill's position in relation to the group making similar products as a whole have the great value of bringing the often remote subject of statistics close to home, and, therefore, of arousing real interest.

Statistics must be accurate, they must be available, and they must be studied. Mr. Whiteside's plan, in several ways, has the definite advantage of stimulating interest in their study, and of arousing in the industry a realization that mills are in a position actually to come to grips with their problems.

Machinery Improvement

Brings Opportunity to the Textile Industry

By Henry G. Lord

President, Bragdon, Lord & Nagle Division,
McGraw-Hill Publishing Co.

THE new and improved machinery now available to textile mills places the textile industry on the threshold of an era of constructive development which is the forerunner of returning prosperity.

Records in other industries so frequently disclose improved machinery and equipment as precedents of better sales, broader markets and increased profits, that we in the textile field are warranted in giving more than casual attention to the fact that such a movement is even now under way. In my 45 years of experience in the industry I have never before seen such remarkable activity and progress in the development of new textile machinery, processes and equipment as is now a feature of the situation.

Progress Follows Equipment

Companies which have been in a stale-mate, can, by installing this new equipment, obtain an automatic and favorable differential in costs and methods. New machinery stirs an industry to new thinking. Progress has always followed equipment. The machinery builder who can develop a really improved machine, can claim substantial credit for the prosperity he brings to the industry using his machine.

In May at the two large expositions of textile machinery, the International in Boston, and the Knitting Arts in Philadelphia, the exhibition space was sold out. The same will be true at Greenville. These shows were filled with exhibits of radically improved and new equipment. It was an impressive demonstration of progress. Visitors left Boston and Philadelphia with the feeling that the textile industries are entering a new equipment era. Furthermore, even so far back as January of this year, it was noticed that an unusual amount of new machinery was being advertised in the textile trade publications. A large percentage of the builders of textile mill machinery have brought out new designs within recent months. Textile mills now have an opportunity to reduce costs and increase flexibility of manufacturing by installing new equipment which has recently been developed, and is now being offered broadly.

A Stimulus to the Industry

The effect of this machinery development must soon be felt in terms of better business for the machinery manufacturers and ultimately a better business for the textile industry. There never is a widespread development of new and improved machinery without a corresponding stimulus to the industry.

An excellent example of this has been written in the history of the automotive industry. Following the war, automobile manufacturing practice reached a common high level of efficiency. Had there been no further development in manufacturing methods, the automobile industry could never have made the progress it has during the last six or eight years. Development was particularly necessary to handle the new models which were produced. In the meantime, however, the machine tool industry which makes the machinery for making automobiles, created new and radically improved production equipment. This equipment was quickly adopted by the automobile plants of the country. The efforts of the machine tool builders thus helped the machine tool users, automobile plants among others, to increase their sales and to make more money.

A Movement to Capitalize

It is logically expected that the present widespread development in textile machinery will be capitalized by textile mills. Certainly machinery as offered today permits a new step forward in textile manufacturing practice. Great interest has already been shown by the mills and many are considering plans that will involve replacement of obsolete machinery.

This new keynote of development, following on top of work done to better economic conditions in the textile industries by the various associations in the field, by cooperative movements among manufacturers and by more intelligent marketing, augurs well for stimulated prosperity in these basic industries.

New Cycle of Operating Practice

The textile industries have experienced a period of drastic depression, yet this depression has been no greater than that suffered by many of our other industries that later have safely survived and prospered, particularly when they were able to find improvements in manufacturing methods, accompanied by better and more aggressive merchandising.

It is characteristic of American industry to swing in cycles, affected to a large extent by the development of operating practice. A real cycle of improved textile manufacturing equipment has already arrived.

First operation of a typical opening layout

Machines, Layouts, and Speeds for

Cotton Opening and Cleaning

By Charles A. Weston

THERE seems to be some confusion in the minds of cotton men as to the distinction between opening and cleaning machines. Under "openers" the following machines are generally listed: bale breaker, hopper feeder (sometimes called "opener"), vertical or Creighton opener, exhaust opener, and a machine having a beater similar to that in the vertical or Creighton opener but in a horizontal position. Then there is another machine, apparently little known, which is similar to a drawing frame in that the principle of drawing out the stock by means of rolls is used. It should be noted, however, that some of these machines are called cleaners by men who should know. The machines which are more generally considered cleaners include the horizontal cleaner, Murray cleaner, centrif-air machine, striking beater, Buckley section, and similar machines.

Dual-Purpose Machine

The C.O.B. machine can possibly be classed as both an opener and a cleaner, due to the fact that the prongs or wires within the passage, in conjunction with the air force, cause a shaking action and assist in fluffing the stock passing through. The up-and-down action causes the foreign matter to be directed to the space for it, the down action or force in particular assisting the foreign matter to find its place.

Cleaning Efficiency

The cleaning or dust trunks are considered in a class by themselves; for, after the stock has been opened and cleaned to some extent, some of the dirt and foreign matter still in it is allowed to drop through the grids, knives, or bars as the stock is passing through to the next process or department. It generally is a section that exerts no positive action, such as agitating or shaking, and its value varies according to the type of stock.

There is no question but that the cleaning efficiency of a section or machine depends mostly on the amount of opening done previously, although of course it is affected to a considerable extent by the grade of cotton in use and the methods employed. When results are not just what they should be, speeds are usually changed at

the beater and fan, and settings are altered in some instances between bars and between bars and beater.

Variety is the spice of life, and at times it is possible by changing the order of the machines to obtain better results. There is no rule to the effect that a high-production machine should not be placed before a low-production machine, or vice versa, but the feed and delivery should be controlled properly from one to the other and the product from one should be in such a condition that the next machine can cause no damage. Many times the production cannot be brought to a satisfactory point due to amount of space, kind of stock, and machine conditions.

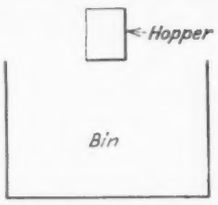

Fig. 1. Old method

Without much justification, many mill men compare opening equipment with cleaning equipment, and individual machines with others of the same classification, on a basis of the amount of dirt taken out. That is to say, they believe that the efficiency of a machine or combination is not so good as that of a previous machine or other combination unless it has taken out just as much dirt. In many cases the drops, dirt, and foreign matter are more from one combination than from another due to the type and amount of opening, and not to the number or type of cleaning machines. At times it is interesting to note that the droppings, dirt, and foreign matter weigh practically the same from one machine or combination as from another; yet there is more good stock in one than the other. Practical experiments made by far-seeing individuals experienced on different makes of machines and with different ideas will prove of more value than will opinions based merely on superficial differences.

Preparatory Opening and Blending

Practically all combinations of opening and picking equipment have one or more bale breakers or hopper feeders. At least one machine builder has brought forth the idea that this type of machine, when used the second or third time in a combination, will be more efficient in its blending or mixing if the angle between the feed apron and spiked apron is reduced. The writer personally believes that the best blending or mixing should be done either before or after the first bale breaker or hopper feeder. Experience shows that by reducing the space between the spikes on the spiked apron and the pins on the stripping roll better opening is obtained but the production is decreased. The same is true if the speed of the stripping roll is increased. This would also be true if the speed of the spiked apron were reduced. Many times a mill believes that it has to sacrifice everything for production in the preparatory processes, rather than sacrifice production for quality. The result of this policy is that in the later processes the mill has to sacrifice production because of end breakage, poor roving and yarn, and generally unsuitable conditions.

Before completing a discussion of the bale breakers and hopper feeders, it should be noted that, especially on some hopper feeders, there are grids or bars and a draw-box under the doffer roll. All who have investigated the value of these devices have noticed that the dirt or drops in this draw-box consist of considerable fine leaf, sand, stalk, and similar foreign substance. Good stock falls into this draw-box only when there is too much space between bars, due in most cases to bent or missing bars. By experimenting with the doffer-roll speed it is possible to change the amount and type of cleaning done; that is, if it is not already efficient.

Bale breakers or hopper feeders are the best machines to use in preparatory opening and blending of stocks, providing a method similar to what has been called the battery-of-hoppers system is used. Fig. 1 shows the old method. Fig. 2 shows the average method in use at present. Fig. 3 illustrates a battery of hoppers on a regular extension apron. Fig. 4 is an arrangement for mixing cotton of different grade and character.

The Vertical Opener

Let us next consider the vertical or Creighton opener. The beater speed of this machine varies from 450 to 800, depending on the opinion of the man in charge. If the stock has been opened previously so that it is fluffy or expanded, the speed of the vertical beater can be higher without causing damage than if the stock is in hard, compressed lumps or bunches. This fact, however, does not necessarily mean that the speed should be higher.

Either grids or screens are used around the beaters of vertical openers, and foreign matter is forced out in either case largely by centrifugal force. The grids, however, further assist the opening of stock and the removal of foreign matter by presenting a rough surface to the cotton and directing the foreign matter to the space for collection.

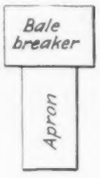

Fig. 2. Usual method

The vertical opener is usually the first machine to be blamed when the question of curly cotton arises. A few reasons for the curling of cotton by this machine include too much moisture in the cotton, stock fed too heavily, tufts too bulky or stock too compact, and stock not previously opened enough to prevent its becoming wedged between the fingers and the grids or perforated screens.

Many mills using two vertical openers in tandem adopt the same speed for both. This is wrong. To obtain better cleaning, the second vertical opener should be run slower than the first, the actual speeds depending on the condition of the stock fed. Providing proper ageing and a certain amount of hopper opening have taken place and the stock is not too condensed when fed, the writer prefers speeds around 500 r.p.m. When the stock is moist and made up of hard tufts, however, it is necessary that the beater travel at a much higher speed in order that it may lift the stock properly. In many cases the propeller blades have to be made larger because of the condition of the stock.

There naturally is a happy medium for a vertical-opener speed, but the writer believes in running the second vertical opener as slow as possible, providing the stock when delivered from the first vertical opener is fluffed and has been returned to as natural a condition as is possible by machine processes. The writer recalls a small experiment made a few years back which showed

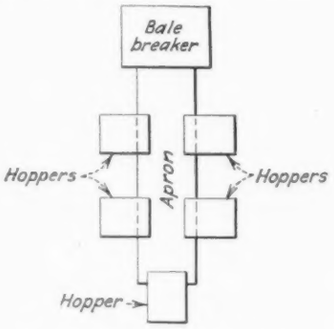

Fig. 3. Battery of hoppers on extension apron

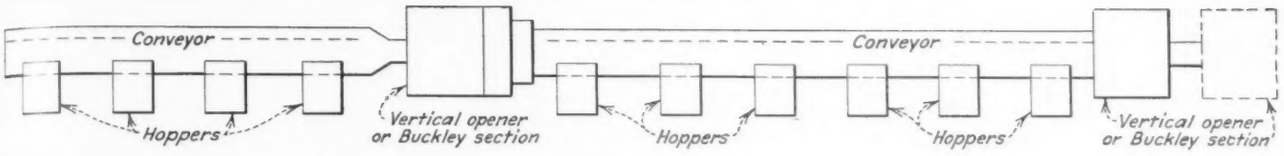

Fig. 4. Arrangement for mixing different grades of cotton

better cleaning and the removal of less good cotton, more sand, and fewer regular motes when the beater speed was decreased. The only unfavorable feature was the decrease in motes, but these were taken out by the following beaters.

Before leaving the vertical opener let us give due credit to it as the most efficient sand remover. China cotton is best opened when vertical openers are included in the layout.

Horizontal Cleaners

There are two types of cleaning machines to be considered. One type uses centrifugal force as its principal means of cleaning, employing no feed rolls. Although the other type uses centrifugal force, it also uses regular beating, dusting, or shaking, obtained by the help of feed rolls.

The type that uses centrifugal force as its principal means of cleaning receives its stock on one end or side and delivers it on the other. With this type of machine the stock must not be retarded in its progress from one end to the other, else it will become damaged. The speed of the beater and the methods used in directing the stock are very important factors. The efficiency of this type of machine is increased with good opening in previous machines. Most of these machines that have been studied by the writer use screens, some revolving and some stationary. The condition of the stock delivered does not appear to be altered so much by whether the screen is revolving or stationary as by an increase or decrease in circulation of the stock and air.

The second type of cleaner mentioned is similar to the Buckley. This type of machine appears to have first resembled a porcupine beater. Later its diameter was extended, the grids or bars were increased, and the direction of the beater was changed. Tests on these machines appear in many instances to contradict themselves, and ideas regarding them are so varied that one opinion, based on either facts, figures or hearsay, appears to be as good as another. Reasons for the contradictory results include differences in speeds, organizations, methods, settings, conditions of equipment, conditions outside the equipment, and the men who outline and conduct the tests or investigations. Instances have been noticed in which proper cleaning of the stock has not been accomplished due to the machine not having been cleaned underneath at regular intervals and before it became filled. There was a time when the construction of this machine made it very difficult to clean, and this possibly was the operator's excuse for not cleaning it at the regular intervals.

Occasionally it appears as though in the second type of cleaner the droppings consist of a considerable quantity of good stock, due to an exaggerated spacing between feed rolls and the top grid, and also to the fact that the grids have been altered so that there are a few that are either set too high or are set at an angle that is against the principle of correct cleaning. It is interesting to note the different types of fingers or blades on the beaters of these machines, and also the angle of the individual fingers or blades. There have been several instances in which laps produced from a combination consisting of Buckley or similar types of beaters are fluffy or too bulky in appearance. This condition tends to cause considerable waste, due to the breaking up of laps when they are handled, no matter how carefully it is done. This condition has been remedied in certain instances by increasing the beater speed and decreasing the fan speed.

It should be mentioned that every machine (whether a cleaner or opener), every type of conveyor or distributor with or without condenser, and every attachment assists in both cleaning and opening the stock. It would therefore not be correct to say that after eliminating an individual machine or section just as good results are to be obtained, unless some change is made on the remaining members of the organization.

The ordinary conveying lattice apron can be altered slightly so that it will remove considerable fine dirt and leaf by merely allowing enough space between slats for the dirt to drop. Many aprons have the slats so close that it is almost impossible for the finest of dirt to drop before it is blown or carried into the next process. The rake conveyor is growing in popularity, at least partly because of the slight agitation afforded by the rakes, which serves in some instances to push and turn over the stock, and because of the use of either perforated plates or cleaning bars directly under the moving stock, which permit the dirt to drop into chambers.

Picker Beaters

Years ago the regular beaters, with the assistance of one hopper, did the opening and cleaning, and mill men appeared to be more satisfied with the results obtained than today. Now it sometimes appears as though none were satisfied. This is due to the fact that competition is so keen that the best is none too good, and to be satisfied is almost to admit that the end is near.

From tests made a few years ago by an organization that specialized in mill problems, it appears that a combination of one two-blade and one three-blade beater affords a yarn that is stronger but not so even as that obtained from a combination of one two-blade and one Kirschner. The droppings from the Kirschner were shown in these tests to have more leaf and dirt and slightly more lint or fiber than the droppings from the blade beaters, but the blade beaters had larger motes.

It is common practice or habit to tell how many blows per inch the stock is getting when these beaters are used, even considering the combing action of the Kirschner beaters in terms of blows per inch. Years past, when three processes of pickers were used, the total blows could be figured for the average mill as approximately 120 to 150 per inch. To recommend this to the mill of today would be out of order, due to the greater amount of opening and cleaning equipment now considered necessary before the regular beaters and picker sections are used. Where three beaters are used today

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Coordinated Operations Urged by Speakers Before N. C. Mill Men

THE formation of a "Central Advisory Board" with supporting committees for the purpose of directing merchandising and coordinating production of cotton textiles was suggested by Fred L. Keen, of Iselin-Jefferson Co., New York, in an address before the 24th annual convention of the Cotton Manufacturers Association of North Carolina, Grove Park Inn, Asheville, N. C., June 17 and 18.

Problems involved in balancing production, which constituted the main theme of convention discussion, must be solved by the individual responsibility of textile executives, according to George A. Sloan, president, The Cotton-Textile Institute, New York, who declared that an intelligent and comprehensive industry-wide promotional campaign would, by further extending the markets for cottons, furnish one means of eliminating the overproduction problem. Resolutions indicating progressive labor policies were adopted.

J. H. Separk, Gastonia, N. C., president of the association, called the meeting to order and, following the invocation, delivered the annual address of the president. He appointed the committee on resolutions, consisting of Charles A. Cannon, Kannapolis, N. C., chairman; A. H. Carr, Durham, N. C., and A. M. Fairley, Laurinburg, N. C. The committee on nominations, also appointed at this time, was composed of Thomas H. Webb, Concord, N. C., chairman; A. M. Dixon, Gastonia, N. C., and J. Walter Williamson, Wilmington, N. C.

Mr. Sloan spoke in part as follows:

The cotton industry has for several years, rather than for several months, been studying the true meaning of balanced production and I am encouraged to believe that it will emerge from the present temporary unfavorable situation on a sounder, better organized and more satisfactory basis than ever before. The condition of our industry at the present time can best be illustrated by comparing the stock situation on Jan. 1 with the situation at the end of May. Stocks at the beginning of the year in the hands of gray goods mills were 461,013,000 yd.; by June 1 they were reduced to 450,481,000 yd. Production during this five-month period was 11% less than for the same months in 1929, and shipments were equal to 101% of the reduced production.

Hunter Marshall, Jr., secretary, Cotton Mfrs. Assn. of N. C.

Continued improvement is reflected in the statistics of stocks and shipments for the first half of the current month. Our principal concern at the present time and during the last few months is the excess inventory that was accumulated during the last quarter of 1929. Nevertheless, the constant and increasing reductions in operations during the last six months, and more especially during the last six weeks, would indicate that the industry is slowly but surely coming to understand that this matter of balanced production is not one which can be dealt with successfully in a spasmodic way.

Time after time we have seen a mill executive push his labor and machinery to all kinds of abnormal hours in and out of seasonable demand and, when finally confronted with excessive stocks, demoralize prices, and the necessity of drastic curtailment, set up a howl that some cut and dried industry-wide plan should be worked out which would prevent him from getting into such a state of affairs. I do not believe that there are any shortcuts to progress and prosperity for those who have disregarded all consideration of balanced production.

What we need most of all is a growing responsiveness on the part of a few highly individualistic individuals to the danger signals which are being pointed out from day to day. Isolation in industry is as out-of-date as the old fashion red-flannel drawers! And so I say that it is to the best interest of mill executives—in fact, in the long run, it is directly to their benefit to subscribe to the sound economic doctrine of balanced production.

Any consideration of this vital question of balanced production, so far as it affects the cotton textile industry, would be incomplete without due reference to what can and is being accomplished in building up demand. Here again the Institute's program recognizes that the corrective action which we need consists not of a single panacea but rather in the combined results of several constructive measures.

It is much to the credit of the industry that it responded so promptly to the opportunity which was presented nearly two years ago in promoting the revival of fashion interest in cotton. Here I think is a clearcut instance of another valuable function of an organization such as the institute. We succeeded in raising a special budget to finance the enlarged services which were initiated last year and have been continued this year. From our experience with this effort, however, I am convinced that we have only scratched the surface in revealing the possibilities for this industry by a still larger program of organized promotion.

I do not believe that I am over-optimistic when I assert that we should have a minimum of $1,000,000 annually for this promotional effort. Some in the industry have fixed the minimum much larger than this sum. The psychological benefit of approximately $250,000 which has been spent during the last two years in advertising and other forms of promotion, including fashion shows, motion pictures, the radio and varied other forms of publicity, is rather startling when one contemplates some of the effects which may be observed this season.

How has this revival of fashion interest been reflected in increased business? In 1929, the volume of cotton goods printed, including print cloths, broadcloths, batiste, voile, dimity, organdy, sheetings and other fabrics used primarily for wearing apparel and draperies, amounted to 902.4 million yards, as compared with 794.2 million yards in 1928, an increase of 13.5%.

Efforts to promote the use of cotton have been successful in fields other than that of style apparel. With a very limited fund available the institute conducted a campaign, largely confined to the educational phase, in behalf of 108 in. bed sheets. One large distributor reports that in 1929 the sale of this length comprised 16% of his entire volume as against 6% in 1927. The proportion of business for 90 in. sheets had dwindled from 66% in 1927 to 24% in 1929.

The more we can harness the resources of this industry behind the institute's efforts in these and many other directions the quicker will be our economic recovery and the reappearance of happiness and contentment among our mill employees and their families. In the meantime, and even after the return of more normal conditions, each and every one must give more thought to regulating himself and less fantastic dreaming of some panacea that will regulate the industry.

F. L. Keen Suggests "Supreme Court"

The proposals for establishing a "Supreme Court" in the cotton textile industry, to be composed of outstand-

ing executives, and to be supported by special committees dealing with individual groups within the industry, were outlined by Mr. Keen in his address which was delivered in the opening session. His discussion of the subject, in part, was as follows:

We are told that "mergers and consolidations, according to group classifications of production, are most essential, but that such movements become practical only as a result of sustained profits." This is the point of view of the banking interests who seem, at the moment, to look upon us with disfavor. I believe there is a way to correct that impression, provided we can, under proper leadership, get to thinking in universal terms, acting on co-ordinated policies, thereby submerging the "individuality complex" which seems to be one of our greatest obstructions.

Cooperative and coordinated practices, without actual merger, or newly financed consolidations are, I believe, entirely possible of attainment. We may begin to experience some of the benefits of merged interests provided the will exists to work under some strong system of "Industrial Organization" which will serve to promote, through cooperation, the unification and coordination of industrial thought and action.

The scope of the cotton textile industry warrants and demands, in my opinion, the founding of the strongest and broadest "Central Advisory Board" that any industry has ever attempted. Such a body would embrace the widest executive experience and most capable organization ability that the industry affords. Such a source of composite thought and directional leadership would include among its functions the following duties, listed in the order of their relative importance:

(1) The recording, dissection and analysis of constructive suggestions for betterment of conditions. In this capacity, the Central Advisory Board would function more or less as a clearing house, or as the "Supreme Court" of the industry; its decrees, the result of the broadest and most critical analyses, demanding universal respect.

(2) The most thorough research throughout the distributive field, straight through to the consumer, in order to obtain accurate estimates of consumer demand as to character and quantity of products wanted; also as to possibilities of market expansion relating to each group classification.

(3) The compilation and distribution of statistical information as to production and consumption, coupled with forceful recommendations concerning a maintenance of balance of these two basic factors, in order that the "law of supply and demand" may be allowed to become operative with its attendant possibilities of reasonable profits.

(4) The cooperation with, and supervisional direction of, rotating committees representing each group of fabric classification. The personnel of each committee to be selected from the merchandising executives of the selling houses.

(5) The dissemination of information concerning up-to-date market requirements as to distributive methods with recommendations, where necessary, that new sales methods be employed to meet changed conditions.

The type of organization that I have outlined might well be built up around The Cotton-Textile Institute, materially broadening its functions; introducing in an advisory capacity, a principle of merchandising direction which has not heretofore seemed a part of its scheme of operations, by combining with our institute organization (merely as a forerunner of the whole when complete) our Association of Cotton Textile Merchants. Such a combination would not only merge the financial, but the moral support of these two representative bodies, figuratively uniting both producers and sellers.

No individual selling house, mill or group of mills, need feel that their individuality, self-importance or independence is lessened through a willingness to work in cooperation with a centralized source of coordinated information which leads to enlightened, unified and constructive methods. I will apply an illustration of the practical operations of this plan to print cloths, believing that the basic principles involved will apply equally in essential points to any fabric classification. . . . (*Mr. Keen then outlined in detail the operation of such a plan as applied to print cloths.*)

From the Advisory Board, through the committees, the sellers, collectively and individually, are informed as to fair market values of their products, and where individual conditions warrant, sellers are urged to hold firm or advance prices, giving their competitors, in urgent need of business, a chance to trade on general market inquiries, so that their position may be strengthened. By such a plan, budgeted and balanced production may become a reality; whereas now, it merely amounts to a phrase without hope of attainment, regardless of how desirable it is generally recognized to be.

By this means, our statistical information can be made to be of practical use whereas now, this information, without its component part, balanced production, merely results as a dangerous menace, advertising our position broadly to the buyer who takes every advantage. Contrast this, if you will, with the unsound and unprofitable practice of drastic curtailment employed after a crisis has been reached.

After reasonable progress in the direction of establishing and operating under a Central Advisory Organization, common effort and common funds of the industry might well be directed toward other requirements; such as style propaganda, advertising and extended uses. First, we must learn how to meet the fundamental needs of proper production and distribution; else increased demand will bring to us no benefits, nor any corresponding measure of prosperity.

Will D. Briggs, elected president Cotton Mfrs. Assn. of N. C.

Annual Banquet Held

The annual banquet was held Tuesday evening. President Separk acted as toastmaster, and while there were no formal talks, the occasion was featured by entertainment provided by the "South Mountain Trio" and music by the Grove Park Inn Orchestra. The afternoon was given over to golf and other recreational activities, including a visit to the Vanderbilt Mansion, at Biltmore.

E. S. Parker, Jr., Greensboro, N. C., delivered an address at the executive business session Wednesday morning on the subject, "State and Local Taxes." Pointing to the fact that the combined state and local tax burden in North Carolina is $99,245,000 annually, or more than the total value of the state's cotton and corn crops, the speaker suggested certain corrective measures for the consideration of those primarily interested in taxation. Stressing the inequalities resulting from application of the uniform rule in property taxation, Mr. Parker urged textile men to favor, in order to provide additional sources of revenue, the classifying of all property, both tangible and intangible, for taxable purposes.

Election of Officers

W. D. Briggs, president and treasurer, Caraleigh Mills Co., Raleigh, N. C., was elected president of the association at the business session Wednesday morning. Other officers named were: K. P. Lewis, Durham, N. C., first vice-president; C. A. Cannon, Kannapolis, N. C., second vice-president; A. M. Fairley, Laurinburg, N. C., third vice-president, and Hunter Marshall, Jr., Charlotte, N. C., secretary-treasurer.

Resolutions were adopted commending the principle of prohibiting the employment of persons under the age of 18 years in industries of the state between 9:00 p.m., and 6:00 a.m.; endorsing the adoption of a basic 55-hour week schedule in place of the present 60-hour week allowed in the state's labor laws; and pledging the association's cooperation to the State Board of Health in efforts to prevent stream pollution.

New Tariff Bill
Went Into Effect June 18

THAT the tariff bill passed the Senate by a majority of two votes on Friday, the 13th, crashed through the House by a wider on the next day, and was signed by President Hoover on Tuesday, is not news now but history. The Republicans have their bill and the Democrats their issue of "Grundyism," since the votes of Senators Reed and Grundy could not be spared.

The Smoot-Hawley tariff act went into effect at 12.01 a.m. June 18. Every effort is being made to put the new provisions into operation smoothly, though rapid enactment gave little time for preparation.

After the passage of the bill by both houses of Congress, a new attack upon it was launched by its Democratic opponents. Observers felt that much of the talk was for its effect upon voters in forthcoming elections. Efforts were made in anti-administration quarters to blame the stock market slump upon the enactment of the bill. Edward Hope, commenting in the New York *Herald Tribune*, upon the tariff, said, "The duty on musical instrument strings goes up from 40% to 60%, but vocal cords are still on the free list."

J. E. Edgerton, president of the National Association of Manufacturers, issued a favorable statement, concluding that such business as had been held up by tariff uncertainty would now go forward and thus tend to restore more general prosperity. On the other hand R. G. Blumenthal, president of the Commercial Factors Corporation, stated that 95% of his company's clients felt that the new tariff would be a detriment rather than an aid to present and prospective conditions in this country.

During the progress of this legislation, the President has been the target of criticism for his seeming uninterest and lack of active direction of tariff rate making. In his statement of last Sunday to the press that he would sign the bill, Mr. Hoover placed the rate-making provision squarely up to Congress when he said:

"Certainly no President, with his other duties, can pretend to make that exhaustive determination of the complex facts, which surround each of these 3,300 items, and which has required the attention of hundreds of men in Congress for nearly a year and a third. That responsibility must rest upon the Congress in a legislative rate revision.

"On the administrative side I have insisted, however, that there should be created a new basis for the flexible tariff, and it has been incorporated into the law. . . . If a perfect tariff bill were enacted today the increased rapidity of economic change and the constanting shifting of our relations to industries abroad will create a continuous stream of items which would work hardship upon some segment of the American people, except for the provision of this relief. Without a workable flexible provision we would require even more frequent Congressional tariff revision than during the past. With it, the country should be freed from general revision for many years to come. Congressional revisions are not only disturbing to business, but with all their necessary collateral surroundings in lobbies, log rolling and activities of group interests, are disturbing to public confidence."

The Senate on Wednesday passed the Borah resolution calling on the Tariff Commission to report on comparative costs of various articles, none of them textiles. This is a step toward putting the flexible provision into effect.

In the tables which follow, TEXTILE WORLD presents a summary of the four major textile schedules and gives comparisons with the former tariff passed in 1922. Because of some changes in defining classification to goods, there are some minor inaccuracies in direct comparisons between the two bills. One important textile item appears in schedule 9 under agricultural products. This is cotton of 1⅛ inch staple or longer which is dutiable under the new law at 7c. per pound. Under the old law this was on the free list. Summary covering cotton goods, wool and wool goods, silks and rayon follows:

Schedule 9—Cotton Mfres.

Commodity	1922 Law	New Rate
Cotton yarn: Unbleached singles—		
To No. 90, lb.	10% to 25%	5%+3-10% *
Above 90, lb.		25% 32%
Bleached, dyed, colored, combed or plied	10½% to 30%	10%+3-10%
Above 90, lb.		30% 30%
Colored with vat dyes:		
Up to 90, lb.	19% to 34%	10%+1-10% *
Above 90, lb.	19% to 34%	37½%+1-10% *
Cotton waste, manufactured, lb.		5% 5%
Cotton sewing thread:		
Per 100 yd.		½c ½c
Not less than 100 yd.		20% 20%
Not more than 100 yd.		35% 35%
Crochet, embroidery, darning and knitting cottons:		
Per 100 yd.		½c ½c
Not less than 100 yd.		20% 20%
Not more than 100 yd.		35% 35%
Countable cotton cloth:		
Unbleached—		
Up to No. 90, lb.	1.05 to 1.30%*	10%+35-100% *
Above No. 90, lb.	30%*	41¼%+35-100% *
		Not less than 55-100%
Bleached—		per no. per lb.
Up to No. 90, lb.	13%+¼%	13%+35-100%
Above No. 90, lb.	33%+¼%	44¼%+35-100%
Printed, dyed, colored or woven figured:		
Up to No. 90, lb.	15%+31¼%*	16%+35-100% *
Above No. 90, lb.	45%+31¼%*	47½%+35-100% *
Colored with vat dyes—		
Up to No. 90, lb.	Up to 44%	16%+35-100% *
Above No. 90, lb.	44%	47½%+35-100% *
Woven with 8 or more harnesses or with jacquard, lappet or swivel attachments—		
Up to No. 90, lb.	Up to 45%	Above duties +10% *
Above No. 90, lb.	45%	Above duties +10% *
Woven with two or more colors or kinds of filling—		
Up to No. 90, lb.	Up to 45%	Above duties +5% *
Above No. 90, lb.	45%	Above duties +5% *
Countable cotton cloth, containing silk or rayon:		
Printed, dyed, colored or woven figured—		
Up to No. 90, lb.	Up to 45%	Above duties +5% *
Above No. 90, lb.	45%	Above duties +5% *
Cloth, in chief value of cotton, containing wool		40% 60%
Tire fabric		.... 25%
Special cloths, filled, coated or waterproofed:		
Tracing cloth, sq.yd.		5c+20% 30%
Window hollands, sq.yd.		3c+20% 30%
Oilcloth, except for floors, sq.yd.		3c+20% 30%
Filled or coated cotton cloths, n.s.p.f. sq.yd.		3c+20% 35%
Rubber and other waterproof cloths		5c+30% 40%
Tapestries and other Jacquard-figured upholstery		45% 55%
Cotton pile fabrics—		
Velvets and velveteens		50% 62½%
Manufactures of pile fabrics—plush and velvet		50% 62½%
Other pile fabrics, corduroys and plushes		50% 50%
Terry-woven fabrics		40% 40%
Cotton table damask		30% 30%
Manufactures of		30% 30%
Household articles of cotton:		
Quilts—		
Jacquard-figured		25% 40%
Not Jacquard-figured		25% 25%
Blankets—		
Jacquard-figured		45% 45%
Not Jacquard-figured		30%, not less than 14½c lb
Jacquard-woven napped cloths		45% 45%

* for each additional number

Commodity	1922 Law	New Rate
Towels—		
Not Jacquard-figured	25%	25%
Jacquard-figured	40%	40%
Sheets and pillow cases	25%	25%
Mop cloths, dust and polishing cloths	25%	25%
Table and bureau covers, etc., n.s.p.f.	30%	30%
Cotton, smallwares—		
Smallwares, n.s.p.f.	35%	35%
Lamp, stove wicking and spindle banding, lb.	10c+12½%	30%
Candle wicking, lb.	....	10c+12½%
Lacings, boots, shoe and corsets, lb.	15c+20c	30%
Loom harness, healds	25c+25%	35%
Labels for articles	50%	50%
Belting and rope, for machinery, lb.	30%	30%-40%
Knit fabrics in the piece:		
Made on warp knitting machines, lb.	55%	45%
Other, lb.	35%	35%
Cotton gloves of fabric knit on other than warp-knit ting machines, doz.	50%	50%
Of woven fabric	25%	25%
Of fabric knit on a warp knitting machine	50%	60%
Hosiery made by knitting machines	50%	50%
Made or cut from knitted fabrics, n.s.p.f.	30%	30%
Wearing apparel, knit, n.s.p.f.	45%	45%
Handkerchiefs and mufflers:		
Not hemmed	40%	Same as cloth
Hemmed	40%	Same as cloth +10%
Clothing and wearing apparel, not knit:		
Men's shirts	35%	45%
Collars and cuffs, doz.	30c+10%	30c+10%
Corsets and brassieres	35%	37½%
Other	35%	37½%
Nottingham lace-curtain machine products	60%	60%
Floor coverings of cotton:		
Rag rugs, hit-and-miss	35%	75%
Chenille rugs	....	40%
Other carpets, carpeting, mats and rugs of cotton	35%	35%
Cotton wiping rags, lb.	Free	3c
Manufactures of cotton, n.s.p.f.	40%	40%
Articles containing cotton of staple 1⅛ in. or more subject to additional duty	....	+10c. lb.

Schedule 11—Wool and Mfres. of

Wool for manufacture:		
Wool not improved, i. e., carpet wools, those coarser than 40s and camel hair (not dutiable when used for carpets, etc.)—dutiable:		
In the grease, lb.	12c	24c
On the skin, lb.	11c	22c
Washed, lb.	18c	24c
Scoured, lb.	24c	27c
Sorted, lb.	...	25c
Wools, n.s.p.f., not finer than 44s:		
Grease or washed	31c	29c
Scoured, lb.	31c	32c
On skin, lb.	30c	27c
Wools, n.s.p.f. and goat hair—		
Grease or washed, lb.	31c	34c
Scoured, lb.	31c	37c
On skin, lb.	30c	32c
Sorted, lb.	31c	35c
Manufactures of wool:		
Wool wastes and by-products, also mohair, alpaca, etc—		
Top waste, slubbing waste, roving waste and ring waste, lb.	31c	37c
Garnetted waste, lb.	24c	26c
Noils, carbonized, lb.	24c	30c
Noils, uncarbonized, lb.	19c	23c
Thread or yarn waste, lb.	16c	25c
All other wool waste, n.s.p.f., lb.	16c	24c
Shoddy and wool extract, lb.	16c	24c
Wool rags, lb.	7½c	18c
Mungo and flocks, lb.	7½c	10c and 8c
Partially manufactured wool and hair:		
Including tops, lb.	33c+20%	37c+20%
Yarns of wool and hair:		
Valued not over $1 per pound, lb.	38c+35%	40c+35%
Over $1 but under $1.50, lb.	36c+40%	40c+45%
Over $1.50, lb.	.....	40c+50%
Woven fabrics weighing not more than 4 oz. per sq.yd.—		
Valued not more than $1.25 per lb.	37-45c+50%	50c+50%
Valued $1.26 to $2.00 per lb.	45c+50%	50c+55%
More than $2.00 per lb.	45c+50%	50c+60%
Same with cotton or vegetable fiber warp—		
Valued not more than $1.00 per lb.	36c+50%	40c+50%
Valued $1.01 to $1.50 per lb.	36c+50%	40c+55%
More than $1.50 per lb.	36c+50%	40c+60%
Woven fabrics weighing more than 4 oz. per sq.yd., including papermakers' felts—		
Valued not more than $1.25 per lb.	24-45%+50%	50c+50%
Valued $1.26 to $2.00 per lb.	45c+50%	50c+55%
Valued at more than $2.00 per lb.	45c+50%	50c+60%
Pile fabrics of wool or hair, and manufactures of:		
Pile, wholly cut or uncut	40c+50%	44c+50%
Pile, partly cut	40c+50%	44c+55%
Wool blankets and similar articles not exceeding 3 yd. long—		
50c to $1 per lb., lb.	18c to 27c	30c+36%
$1 to $1.50 lb., lb.	30c+35%	33c+37½%
Over $1.50 lb., lb.	37c+40%	40c+40%
†Plus 32½%.		
Felts not woven, wholly or in chief value of wool:		
Not over 50c, lb.	18c+30%	30c+35%
50c to $1.50, lb.	27c+25%	30c+35%
Over $1.50 lb., lb.	37c+40%	40c+40%
Wool small wares, lb.	45c+50%	50c+50%
Wool-knit goods:		
Wool-knit fabrics in the piece—		
Not over $1 lb., lb.	30c+40%	33c+40%
Not over $1 lb., lb.	45c+50%	50c+50%
Wool hosiery, gloves and mittens—		
Not more than $1.75 doz., lb.	36c+35%	40c+35%
More than $1.75 doz. pair, lb.	45c+50%	50c+50%
Wool-knit underwear—		
Valued not over $1.75 lb., lb.	36c+30%	40c+30%
Over $1.75 lb., lb.	45c+50%	50c+50%
Wool-knit outerwear—		
Value not over $1 lb., lb.	36c+40%	44c+45%
$1 to $2 lb., lb.	40c+45%	44c+45%
Over $2 lb., lb.	45c+50%	50c+50%
Wool-wearing apparel not knit or crocheted:		
Clothing and wearing apparel, not over $2, lb.	24c+40%	33c+45%
$2 to $4, lb.	30c+45%	33c+45%
Over $4, lb.	45c+50%	50c+50%
Hat bodies, lb.	24c+45%	40c+75%
Oriental and similar carpets and rugs and Chenille Axminsters:		
Oriental, Axminsters, Savonnerie, Aubosson and other, not made on power-driven loom, sq. yd.	550%	50% not less than 45%
Oriental weave, produced on a power-driven loom, sq.yd.	55%	60%
Chenille Axminsters, sq.yd.	50%	50%
Machine-made carpets and rugs, n.s.p.f.:		
Axminster carpets and rugs, valued not more than 40c. per sq.ft.	40%	30%
Valued more than 40c.	40%	60%
Articles made from carpets or rugs	30%	30%
Manufactures of wool, n.s.p.f.	50%	50%
Fabrics containing 17% or more in weight of wool (but not in chief value thereof),	40%	Proportionate to duties of respective materials

Schedule 12—Silk Mfres.

Silk, partially manufactured, lb.	35%	35%
Spun silk:		
Singles, not bleached, etc., lb.	Up to 40%	40%
Bleached, dyed or plied	45%	50%
Thrown silk, lb.	25%	20%
Sewing silk, twist, floss, and silk thread or yarns, n.s.p.f.—		
In the gum, lb.	$1 per lb.	40%
In the gum, lb.	35%	40%
Ungummed or further advanced, lb.	$1.50	40%
Ungummed or further advanced, lb.	40%	40%
Woven fabrics in piece (broad silks):		
Plain	55%	55%
Jacquard-figured, not exceeding 30 in. wide	....	60%
Silk pile fabrics:		
Pile wholly cut or uncut—		
If velvet	60%	65%
Other	60%	60%
Pile, partly cut—		
If velvet	60%	70%
Other	60%	65%
Velvet ribbons	60%	60%
Silk ribbons:		
Plain	55%	55%
Jacquard-figured	55%	65%
Silk small wares other than ribbon	55%	55%
Silk knit goods:		
Silk knit fabric	55%	55%
Silk knit underwear	60%	60%
Silk hosiery	60%	60%
Silk knit gloves	60%	60%
Silk knit outerwear	60%	60%
Silk handkerchiefs and mufflers:		
Not hemmed	55%	55%
Hemmed or hemstitched	60%	60%
Silk wearing apparel:		
Men's shirts and collars not embroidered	60%	65%
Not of lace or embroidery	60%	65%
Manufactures of silk, n.s.p.f.	60%	65%

Schedule 13—Mfres. of Rayon or Other Synthetic Textiles

Rayon yarn:		
Singles—		
Weight 150 deniers or more, lb.	45c—45%	40%
Less than 150 deniers, lb.	45c—45% (40c per lb. minimum)	50%
2 or more yarns twisted together—		
150 deniers or more, lb.	50c—45%	50%
Less than 150 deniers, lb.	50c—45% (45c per lb. minimum)	55%
Rayon waste (except acetate)	10%	10%
Staple fiber (cut rayon filaments other than waste) lb.	20%	25%
Noils	....	25%
Carded rayon	....	10c+25%
Sliver and tops	....	10c+30%
Spun rayon yarn:		
Singles, lb.	25c—45%	12½c+45%
2 or more yarns twisted together, lb.	30c—45%	12½c+50%
Rayon yarn—put up for handwork and rayon sewing thread	50c—45% (45c per lb. minimum)	55%
Rayon in bands or strips (visca and cellophane suitable for braiding and weaving), lb.	55c—45% (45c per lb. minimum)	45%
Woven fabrics in the piece	45c+60%	45c+60%
If Jacquard figured	....	45c+70%
Pile fabrics, including pile ribbon and articles of	45c+60%	45c+60% or 65%
Rayon ribbons (except pile) and small wares	45c+60%	45c+60%
If Jacquard	....	45c+70%
Knit goods:		
Knit fabrics of rayon, lb.	45c+60%	45c+60%
Knit goods of rayon, lb.	45c+60%	45c+65%
Handkerchiefs and woven mufflers	45c+60%	45c+60% or 65%
Clothing and articles of wearing apparel	45c+60%	45c+65%
Manufactures of rayon, n.s.p.f.	45c+60%	45c+65%

Making the Drawing-In Draft for Narrow Fabric

By Edwin J. Gibbons

IN ORDER to understand drafting thoroughly, it is first necessary to have some knowledge of the parts of the loom directly concerned with this branch of designing. These are the harnesses, the heddles, the reed, and the mechanism that operates the heddles, or the harnesses and heddles. For the present we shall consider only the harnesses, heddles, and reeds.

The harness frame is that part of the loom that carries the heddles, and that rises and falls to form the different sheds. The frame is rectangular in shape, is almost the full length of the loom, and may be constructed of all metal, all wood (excepting the fittings), or part metal and part wood. It is made as thin as possible—compatible with strength—seldom being over $\frac{1}{2}$ in. in thickness. Ordinarily twenty-five is the maximum number of harnesses found in a common narrow-fabric loom.

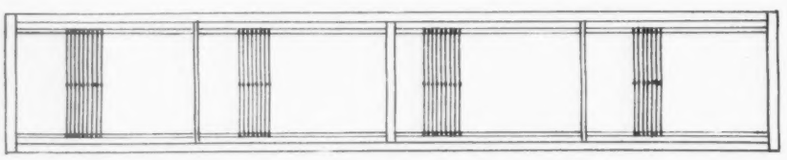

Fig. 1. Ordinary harness frame for narrow-fabric loom

Harnesses are also variously called shafts, staves, or leaves, but usage of these terms is chiefly European.

Fig. 1 illustrates an ordinary harness frame for a narrow-fabric loom with a few heddles appearing in each of the different sections.

Two Common Types of Heddles

There are two common types of heddles—twin-wire heddles, which, as the name implies, are constructed of two parallel wires; and flat steel heddles. Both types have closed loops at either end by means of which they are attached to the harness frame, and an eye or mail, usually centrally located along the length of the heddle, through which the warp ends are drawn.

The flat steel heddles are thinner than the wire heddles, especially at the eye; therefore they will lie more compactly and permit of a higher sley. The eyes are rounder and smooth and free from tapering corners. For repair work the twin-wire heddles are invaluable, as by melting the solder at the top and bottom loops, and opening the loops, these heddles may be twisted onto a harness frame to replace any broken flat steel heddles. The twin-wire heddles are preferable for the manufacture of elastic goods.

Fig. 2 illustrates a common twin-wire heddle; and Fig. 3 illustrates a familiar type of flat steel heddle.

In heddles made for special work, such as the manufacture of pile fabrics, the eye may be off center. For some kinds of double-shuttle work the heddle may have two eyes, either eye placed at an equal distance above and below the center of the heddle. Other types of heddles include jacquard heddles, leno or doup heddles, string heddles, etc. Heddles are often referred to in foreign publications as "healds."

Types of Reeds

The reed is that appliance through which the warp ends are drawn after being threaded through the heddles, resembling a comb closed at both ends. It is located in the lay just behind the shuttle. The reed separates the warp ends into small groups, thereby governing to some extent the woven width of the material, and beats in the picks at each forward movement of the lay.

Reeds are constructed of thin, flat pieces of wire set into top and bottom sections known as "ribs." The ribs may be formed of half-round pieces of wood $\frac{3}{8}$ in. to $\frac{1}{2}$ in. wide, or may be of metal. When wood is employed, a piece is laid at either side of the top and bottom of a series of flat wires set edgewise, and held in place by passing a thread (which has previously been impregnated with pitch) around the two pieces of wood and between each successive pair of wires. The thread also serves to keep the wires separated, or spaced, the distance being governed by the thickness of the thread and the number of turns placed between each pair of wires. This type of reed is known as a pitch reed.

When metal is used for ribs, a round wire is substituted for the thread; and when the winding is completed, the ribs and wires are fixed in place by soldering. This type of reed is termed a soldered reed.

Fig. 4 illustrates a common pitch reed as used in the manufacture of narrow goods.

Reeds are usually designated by the number of "dents" per inch—a dent constituting one wire and the space between that wire and the next wire. Thus, a reed with 24 dents (wires and spaces) per inch is termed a 24 reed; one with 36 dents per inch is termed a 36 reed, etc. The spaces between the flat wires are also called "splits."

Fig. 2. Common type of twin-wire heddle

Fig. 3. Flat steel heddle

The J. A. Gowdey Reed & Harness Mfg. Co., Inc., Providence, R. I., the pioneer manufacturer of reeds in America, is authority for the statement that reeds range from 1 dent per inch to 140 dents per inch. In narrow-fabric manufacture the range is about 6 or 6½ dents per inch to 82 dents per inch, and the length may be from ½ to 12 or more inches.

Besides regular reeds there are many kinds of special reeds, such as fan reeds (used in the manufacture of shaped goods), graduated reeds (in which the various sections are of a different dent), oval-dent reeds, leno reeds, movable reeds, slide reeds, back reeds (or combs), etc.

Oval-dent reeds are those in which the wire used is slightly oval-shaped, instead of flat. This type of reed is employed extensively in the manufacture of elastic goods and rayon fabrics. The oval feature tends to eliminate possible chafing, especially of the rubber.

Three Steps Before Weaving

After the design has been painted in, there are at least three additional steps that must be considered preparatory to the operation of weaving. These are:

1. To furnish a plan by which the warp threads are to be drawn through the heddles in the different harnesses. This is called the "harness draft" or "drawing-in draft."

2. To furnish the plan according to which the different harnesses are to be raised or lowered, and which, in conjunction with the harness draft, is necessary to reproduce the pattern. This plan is called the "chain draft" or "pegging plan."

(In the case of jacquard designs, the chain draft is really the whole design, and directly from this are cut the cards by means of which the different heddles are raised or lowered.)

3. To furnish the plan according to which the warp ends are to be drawn through the reed. This plan is called the "reeding." In cloth manufacture it is often termed the "sleying-plan" or the "set."

Drawing-In Draft

The purpose of the drawing-in draft is to designate the particular harness on which each individual warp end is to be drawn. It is taken from the design and may be laid out on point paper directly below the design. The spaces between the vertical lines on the point paper represent the warp threads, and the spaces between the horizontal lines represent the harnesses. The harness on which a particular end is to be drawn is often indicated by coloring with black paint the square representing the intersection of that end and the harness.

In this country the harness frame nearest the breast beam or front of the loom is usually considered as the first or No. 1 harness. Consequently, in the drawing-in draft it is the first harness reading up from the bottom.

It is customary to start the draft at the left side, and to begin with the first warp end. Theoretically, this end should be drawn through the first heddle on the first harness. If the second end in the design interlaces in the same manner as the first end, it is drawn through the second heddle of the first harness; but if it interlaces differently from the first end, it is drawn through the first heddle of the second harness. If the third end interlaces in the same manner as either of the first two ends, it is drawn in the empty heddle next to, and on the same harness as, that end. But if the third end weaves differently from either of the first two ends, then it must be drawn on the first heddle of the next harness, etc. From this it will be seen that all ends that weave alike may be drawn on the same harness, and every end that interlaces differently from any of the preceding ends must be drawn in on a different harness. In the plain weave, for example, the first end and every odd-numbered end may be drawn in on the first harness; and the second end and every even numbered end, drawn in on the second harness.

At *A* in Fig. 5 is shown the plain weave, and at *B* is shown the drawing-in draft.

Figure 6-A shows the two-up-two-down twill weave, four repeats of warp and two repeats of filling; and Fig. 6-B shows the manner in which this weave may be drawn. Note that the first, fifth, ninth, and thirteenth ends weave alike and, therefore, are drawn on the same (No. 1) harness; and that the second, sixth, tenth, and fourteenth ends weave alike and are drawn on one (the second) harness; and so throughout the design.

Fig. 7 shows the five-harness filling-flush satin weave and the manner in which it may be drawn in.

In practice, however, unless one is crowded for harnesses, the plain weave and other close textures are seldom confined to the minimum number of harnesses. The plain weave is more often drawn on four or more.

Fig. 8 shows one method of drawing the plain weave on four harnesses; and Fig. 9 shows another method of drawing the same weave on four harnesses.

The method shown in Fig. 8 is less difficult for the weaver, especially if he is a learner, but is avoided by some manufacturers who claim that the harnesses, continually passing each other, present the possibility of considerable friction, not only to these parts, but also to the harness straps, sheaves, jacks, warp ends, etc.

These manufacturers claim, that, when the draw shown in Fig. 9 is used, the task is much easier for the loom, as the first and second harnesses rise and fall together, and the third and fourth harnesses rise and fall together. But this draw (which is known as the "skip-shaft" draw) is a little difficult for a weaver not accustomed to it. Each method has its followers.

There are many types of drawing-in drafts, among

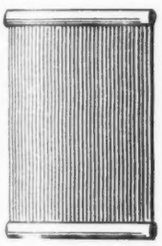

Fig. 4. Common pitch reed

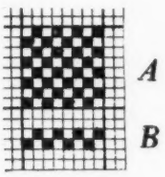

Fig. 5. Drawing-in draft for plain weave

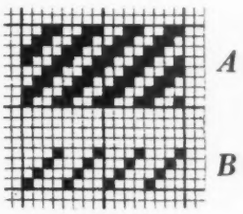

Fig. 6. Two-up two-down twill

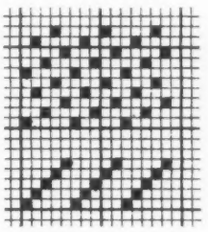

Fig. 7. Five-harness filling-flush satin

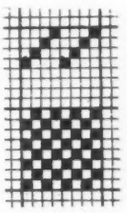

Fig. 8. Plain weave on four harnesses

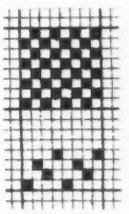

Fig. 9. Skip-draft draw

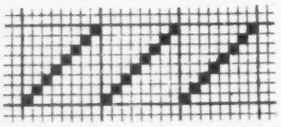

Fig. 10. Straight draw

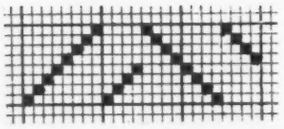

Fig. 11. Angle draw

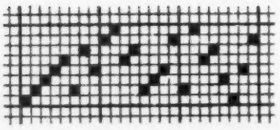

Fig. 12. Broken draw

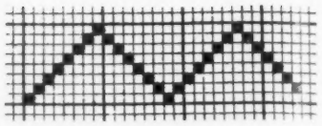

Fig. 13. Point draw

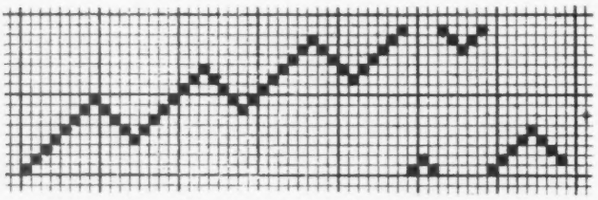

Fig. 14. Fancy-point draw

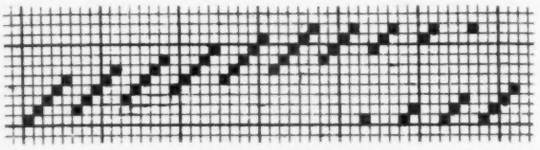

Fig. 15. Common skip draw

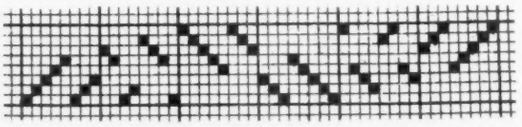

Fig. 16. Fancy skip draw

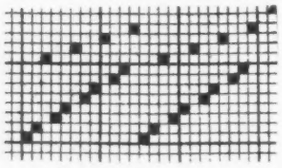

Fig. 18. Double draw

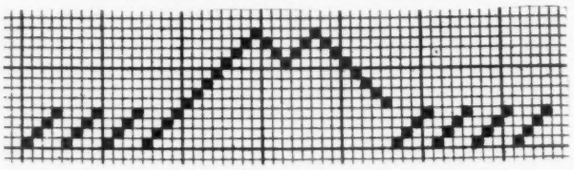

Fig. 17. Sectional draw

which may be named the straight draw, the angle draw, the broken draw, the point draw, the skip draw, the sectional draw, and the double draw.

In the straight draw the warp ends are drawn in in rotation in the heddles on the different harnesses. For instance, in Fig. 10, which illustrates the straight draw on eight harnesses, the first end is drawn in the first heddle of the first harness; the second end is drawn in the first heddle of the second harness; the third end is drawn in the first heddle of the third harness, etc.—until the eighth harness has been used. The next eight ends (beginning with the ninth end in the design) are drawn in in the same manner as the first eight ends; i.e., the ninth end is drawn in the second heddle of the first harness, the tenth end is drawn in the second heddle of the second harness, and so on on up to the sixteenth end. This process is continually repeated, drawing the successive warp ends in order on harnesses Nos. 1 to 8 until all of the ends have been drawn in.

Figures 6, 7, and 8 are straight draws.

Angle draws are those in which the warp ends are drawn in straight for a certain number of harnesses and then, after skipping a few harnesses and beginning on a harness either beyond that on which the latest end was drawn, or on a harness nearer the breast beam, reversing the direction of the draw.

Fig. 11 illustrates an angle drawn on eight harnesses.

Angle draws are used for broken twill, figured broken twill, and similar weaves.

Broken draws, as the term implies, are those presenting a more or less broken appearance. They are generally used in connection with combination weaves, especially those which have been reduced to a minimum number of harnesses.

Fig. 12 illustrates a broken draw on eight harnesses.

Point draws are those that run to a point, as shown in Fig. 13, and are usually made from pointed twill and figured plain weaves. These draws may be further classified as single-point draws, double-point draws, triple-point draws, etc.

Fig. 14 illustrates a fancy point draw on 15 harnesses.

Skip draws are the result of skip twill and other fancy weaves. They have the appearance of a series of straight draws, one following the other, with the exception that each successive group is one or more picks higher or lower than the preceding group.

Fig. 15 illustrates a common skip draw; and Fig. 16 illustrates a fancy skip draw.

Sectional draws are employed extensively in narrow-fabric work, each section usually being reserved for a separate weave or part of the fabric. The front set of harnesses is usually reserved for the ground weave, and the other group or groups of harnesses are devoted to the figure warp, the edge warp, etc.

Fig. 17 illustrates a sectional draw in which one section of the warp is drawn on four harnesses, and the other section is drawn on eight harnesses.

Double draws may be employed for two-ply or similar fabrics, one set of harnesses being used for the face and one set for the back; but in the manufacture of narrow goods double draws are probably most often used in connection with extra warp for figure, weight, etc.

Fig. 18 illustrates a double draw on twelve harnesses, the front set (eight) being used for the face fabric, and the back set (four) for the back fabric; the proportion of face ends to back ends being two to one.

With More Than One Weave

In planning drawing-in drafts for narrow fabrics where, as often as not, more than one type of weave is encountered in a single piece of goods, some cognizance must be taken of the different orders of interlacing, as all weaves do not *take up* alike. For instance, a given length of material interlacing in plain-weave order will require a greater length of warp yarn than would the same length of material if interlaced in three-up-one-down or four-up-four-down order. Therefore, warp ends of varying take-ups must be placed on different warp beams, and when such is the case some means must be devised by which to indicate on the drawing-in draft from which warp the successive ends are to be selected. So, in making drawing-in drafts for narrow fabrics, instead of

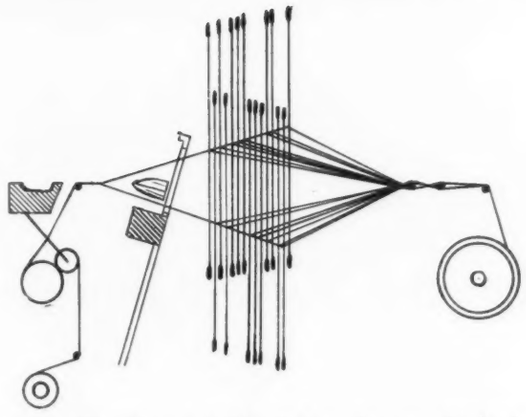

Fig. 19. How suitable shed angles are obtained

using black paint, recourse is often made to crosses, dots, circles, diagonal lines, etc., each different mark designating the warp beam from which that particular end is to be taken.

Furthermore, the order of drawing in the warp ends of a fabric which is to be woven according to more than one order of interlacing (and, consequently, is on more than one warp beam) is not in strict accordance with the sequence of ends in the design. The reason for this follows:

To make a good shed, each successive harness, working from the breast beam or front of the loom backwards, is adjusted to rise higher and drop lower than the preceding harness. That is, the angle of incline formed by the tops of the harnesses constituting the upper shed, and the angle of decline formed by the bottoms of the harnesses constituting the lower shed, should conform as nearly as possible to the angle of the respective upper and lower sheds. This is so that the ends drawn on the back harnesses will make as wide a shed as those drawn on the front harnesses. Fig. 19 illustrates the idea in a pronounced manner.

Consequently, the greater the distance from the front of the loom any harness or group of harnesses is set, the greater will be the strain the ends drawn on those harnesses must encounter. (Note in Fig. 19 the acute angle at which the back ends are held).

Therefore those ends in the pattern or design that interlace most often are usually drawn on the harness or group of harnesses nearest the breast beam (where the least strain is encountered), those ends that interlace less often are drawn on the next harness or group of harnesses, etc., until those ends in the design that interlace the least often are drawn on the last harness or group of harnesses required for the pattern.

Thus, the plain weave, which is unsurpassed for closeness of texture, would, under ordinary conditions, be drawn in on the front set of harnesses, the looser textures following in order. This is not always the case, however—for instance, where it would result in a very complicated draw, and a much simpler draw would not require an excessive number of harnesses or result in an excessive strain on any of the ends; or where a strong or comparatively heavy yarn is used for the plain weave, as contrasted with a fine yarn for the less frequently interlaced weave. The relative importance of the different ends in the fabric also enter into the problem; back ends usually being not as important as face ends; and stuffer ends being of less importance than the back ends. Binder ends are often of great importance, and usually occupy the front harnesses.

Typical Draft from Three Warps

Fig. 20 illustrates a typical narrow-fabric drawing-in draft. Here the ends are to be taken from three different warps. The circles represent the ground warp, which is plain weave; the crosses represent the edges, which interlace in 2-2 warp-rib order; and the diagonal the extra warp for figure, which needs three harnesses.

In instances where more than one end is to be drawn through a single heddle, the ends to be so drawn are indicated at the proper place on the draft by the use of numerals. In many cases—probably in the majority of narrow-fabric drafts—it so happens that the major part of the drawing-in draft consists of but repetitions of a few ends. In such instances the ends to be repeated are bracketed, and the number of times they must be repeated is indicated above the bracket. Fig. 21 is illustrative of cases cited in the foregoing. The first two harnesses carry the binder ends; the next four harnesses carry the ground warp; and the seventh harness carries a stuffer warp of which the ends are drawn in more than one in a heddle. The central portion of the draft is to be repeated 13 times.

Drawing-in drafts for use in the weave room may be copied on large 8 x 8 (Brussel paper cloth size) or similar paper and mounted on uniformly sized cardboards for facility in filing.

Drawing-in drafts for regular jacquard work are usually made straight from 1 to 8; i.e., as if the warp was to be drawn in straight or eight harnesses. This custom is followed regardless as to whether a 200-hook or a 400-hook jacquard head is used or whether the holes in the comber boards are arranged in rows of 8's or rows of 16's. The jacquard draft should also indicate the row (as the heddles are suspended in rows) on which the drawing should be started; and when the ends are to be

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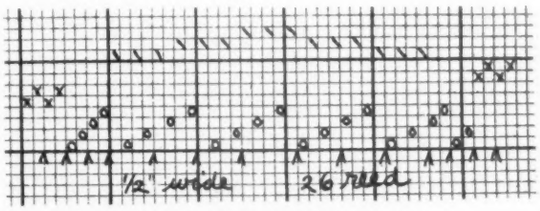


Fig. 20. Ends taken from three warps

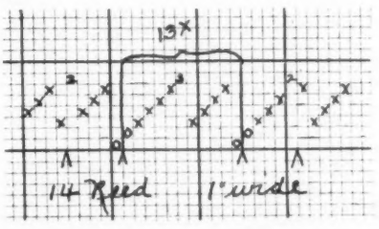


Fig. 21. Use of numerals

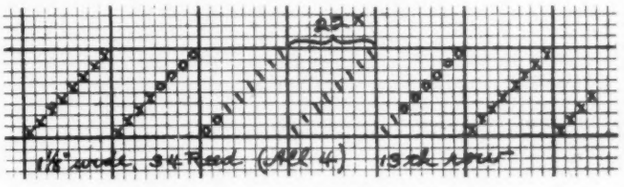


Fig. 22. For jacquard pattern

Light Fastness

of Mixtures of Anthrene Jade Green and

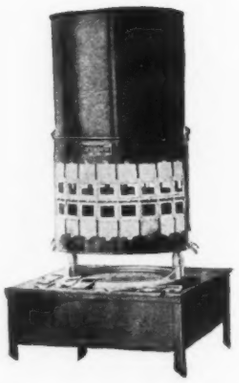
By Ernest R. Borho

ANTHRENE Jade Green is generally assumed to possess excellent light fastness, but it has been observed that its fastness does not come up to expectations in light shades and in dyeings in which the cast has been altered by the admixture of yellow dyes. This peculiar property has caused dyers and chemists considerable worry and trouble, especially since the establishment of recognized testing laboratories for the ascertainment of the fastness of dyed fabrics. Searches in the literature and inquires sent to the dyestuff manufacturers revealed that detailed information concerning the factness of Jade Green and yellow mixtures was not available.

Lack of Data

This lack of data necessitated a painstaking and time-consuming investigation to determine which of the vat yellows were suitable for shading Jade Green without deleteriously affecting its light fastness. Its scope included the effect of various yellow dyestuffs and, within certain limits, the influence of their concentration.

It should be pointed out that this research was conducted in the laboratory of a textile-finishing plant, with the main object of determining which yellows best suited its purpose; therefore the conditions of the experiments and the depths of shades investigated were limited by the requirements of that particular plant. However, the results, while not sufficiently extensive to definitely draw comprehensive conclusions or provide a basis for theorizing as to cause, should prove interesting to those engaged in the process of dyeing of light vat green shades on cotton fabrics.



Fadeometer for testing light-fastness of colored fabrics

The dyestuffs under consideration were: Anthrene, Jade Green double powder, Anthrene Yellow G powder, Anthra Yellow GC powder, Vat Yellow EK powder, Indanthrene Yellow 3GF powder, Indanthrene Yellow 5GK powder, Indanthrene Yellow GK powder, Indanthrene Yellow GF powder, Indanthrene Yellow FFRK powder, Ciba Yellow GX powder, Cibanone Yellow R powder, Indanthrene Golden Yellow GR powder, Indanthrene Yellow 3RT powder, Indanthrene Golden Orange 3G powder, Indanthrene Golden Orange G powder, and Ponsol Brilliant Yellow 4G Paste.

Method of Testing

The cloth used for the trials was a two-ply cotton voile prepared for dyeing by kier boiling with caustic soda and soap, mercerizing, and bleaching with sodium hypochlorite. It was cut into patches for beaker dyeing, each patch weighing five grams. Using the methods recommended by the manufacturers, the colors were applied in such strengths that the total coloring matter equaled 1% of the weight of the cloth. One series of dyeing consisting of Jade Green without the admixture of any yellow dyestuffs was made in the following concentrations: 1.0, 0.9, 0.8, 0.7, 0.6, 0.5, 0.4, 0.3, 0.2, 0.1 per cents. The dyeings were proportioned so as to systematically cover in a not too detailed and minute manner the complete range of shades possible by the combination of the two colors. The following proportions of Anthrene Jade Green and the various yellows were selected: 90/10, 80/20, 70/30, 60/40, 50/50, 40/60, 30/70, 20/80, and 10/90.

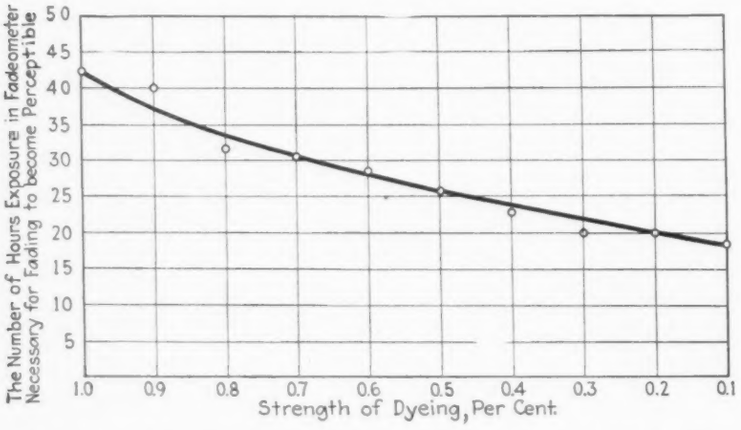


Fig. 1. Fadeometer fastness of Anthrene Jade Green double powder

nd Vat Yellows

Fadeometer Fastness of Mixtures of Anthrene Jade Green Double Powder and Various Vat Yellows

Proportion of Anthrene Jade Green Double Powder and Yellows	The Number of Hours' Exposure in Fadeometer Necessary for Fading to Become Perceptible								
	Green 9% Yellow 1%	Green 8% Yellow 2%	Green 7% Yellow 3%	Green 6% Yellow 4%	Green 5% Yellow 5%	Green 4% Yellow 6%	Green 3% Yellow 7%	Green 2% Yellow 8%	Green 1% Yellow 9%
Anthrene Yellow G Powder	48	53	56	53	49	45	43	45	49
Antra Yellow G C Powder	37	29	25	19	19	17	17	16	16
Vat Yellow E K Powder	33	33	33	33	31	31	31	31	31
Indanthrene Yellow 3 G F Powder	38	36	34	32	32	32	28	28	28
Indanthrene Yellow 5 G K Powder	32	32	30	30	28	28	28	28	28
Indanthrene Yellow G K Powder	60	60	58	58	58	58	54	46	33
Indanthrene Yellow G F Powder	32	32	32	32	30	30	30	30	30
Indanthrene Yellow F F R K Powder	100	100	100	88	88	58	45	42	64
Ciba Yellow G X Powder	64	56	40	38	32	27	19	16	16
Cibanone Yellow R Powder	65	46	41	30	28	25	21	17	17
Indanthrene Golden Yellow G K Powder	63	61	61	58	53	42	30	24	24
Indanthrene Yellow 3 R T Powder	81	81	77	81	81	61	49	39	45
Indanthrene Golden Orange 3 G Powder	76	76	66	58	45	45	48	52	74
Indanthrene Golden Orange G Powder	81	65	57	45	38	33	33	33	40
Ponsol Brilliant Yellow 4 G Double Paste	44	36	36	33	28	22	22	22	20

Fig. 2. Chart showing fadeometer fastness of mixtures of Anthrene Jade Green double powder and various vat yellows

For the purpose of reducing the possibility of dyeing errors, each combination was made in duplicate, but at different times. This meant separate weighings, dissolving of dyestuffs, and dyeings. After comparing the similar samples for perceptible differences in shade or strength and discarding any so affected, two patches were cut for each swatch for exposure in the Fadeometer. This procedure gave four samples of every combination for fading tests.

The Fadeometer was of the latest type, provided with a humidifier and a voltage control which permitted a drop of 140 volts across the arc to be maintained irrespective of major variations in the line voltage. Samples were exposed to the action of the arc until fading or permanent alteration in shade became perceptible. Similar patches were faded at different times and examined without reference to each other by different operators. This was done in order to secure unbiased opinions.

Results of Exposures

A series of dyeings consisting of Jade Green double powder without the additions of any yellow was used for the purpose of determining the variations of its Fadeometer fastness in decreasing concentrations. Results of this test are graphically presented in Fig. 1. The remaining data concerning mixtures of Jade Green with the various vat yellow dyestuffs are presented in chart form for sake of easy comparison and study in Fig. 2. The points in the graph (Fig. 1) and the figures in the chart (Fig. 2.) are each averages of four Fadeometer exposures and are considered representative of the fastness under these conditions of dyeing, fading, and examining.

The results may be somewhat misleading unless due notice is taken of the fact that the alteration of the shade and brightness of Jade Green depends upon the cast and tinctorial powers of the various yellows. Differences in cast and brightness cannot be concisely defined, described, and interpreted without the use of some color-analyzing or measuring device. Since no colorimeter is universally adopted, color definition is impractical, but it is deemed advisable to suggest to the reader that he supply himself with a sufficient number of dyed samples or color cards to guide him in the study of the results. Those engaged in the dyeing and matching of cloth should find that 1% dyeings of Jade Green and 1% dyeings of the yellows sufficient to assist them in the selection of the yellow necessary for the production of a given shade.

The brightness of the greens can be very roughly classified as bright, fairly bright, dull, and very dull. Accordingly we find: Bright; Combinations of Jade Green and Anthra Yellow GC, Vat Yellow EK, and Ciba Yellow GX. Fairly Bright; Combinations of Jade Green and Ind. Yellow 3GF, Cibanone Yellow R, and Ind. Yellow 5GK. Dull; Combinations of Jade Green and Anthrene Yellow G, Ind. Yellow FFRK, Ind. Yellow GF, Ind. Golden Yellow GK, Ind. Yellow GK, and Ponsol Brilliant Yellow 4G. Very Dull; Combinations of Jade Green and Ind. Yellow 3RT, Ind. Golden Orange 3G, and Ind. Golden Orange G.

The results are self explanatory, but it might be well in summarizing them to add that the Fadometer fastness of Anthrene Jade Green double powder decreases rapidly in light shades. The addition of vat yellows modifies this optical effect of decreasing fastness depending upon the character of the dyestuff. As a general rule, the results are as follows: (1) the brighter and greener the yellow the less fast the combination; (2) the more yellow in the combination the less fast the result; and (3) the duller the combination the faster the result.

John Lovell, Percy Adamson, Robert E. Davis, T. H. McKinney

Don Hurlbut, Allen Diefendorf, Clyde Wilkins, W. S. Lawson

George Smith, R. J. Mathewson, Lester Ross, George West

Dwight Williams, Walter Toy, H. T. Bryan, Jr., Guy Henley

Chattanooga Yarn Men Hosts at Golf

CHATTANOOGA, TENN.

ROBERT DAVIS, of W. B. Davis & Son, Inc., Fort Payne, Ala., and Chattanooga, is the new golf king. His crown was won with a net score of 126 for 36 holes in the fifth annual tournament of the Chattanooga Yarn Men's Association.

The outing was held Thursday and Friday, June 12 and 13, on the Chattanooga Golf and Country Club course and was climaxed with a banquet tendered to their guests by the local yarn peddlers Friday night. Prizes were awarded at that time.

Thursday night's program included a dinner at the Chattanooga Golf and Country Club and a putting contest on the Tom Thumb golf course at Fairyland, Lookout Mountain.

Tom Moore, president of the association, acted as toastmaster at the banquet. Entertainment for the occasion was arranged by a committee headed by Wilbur S. Lawson, of Standard-Coosa-Thatcher Co.

J. C. Woodall, of Hampton Co., and W. B. Purse, of Tubize Chatillon Corp., were in charge of invitations, while R. H. Griffith, of C. D. Gott Co., headed the committee on the tournament and golf prizes. B. S. Hart, of American Glanzstoff Corp., is secretary-treasurer of the association.

Award of Prizes

Prizes awarded for low net scores, presented at the banquet, ranged from the coveted silver loving cup of the association to silver goblets, matched clubs and Gladstone bags. Net scores for the two days' play were added in deciding upon the winners. Those receiving awards, the prizes, and the donors of trophies were as follows:

1. Robert Davis, W. B. Davis & Son, Inc., Fort Payne, Ala., and Chattanooga; Chattanooga Yarn Men's Association cup, which remains in the winner's possession for one year; silver cup which is permanent property of the tournament winner and silver goblets, given by the Dixie Mercerizing Co.
2. Neil Ashe, Ashe Hosiery Mills, Knoxville, Tenn.; matched woods, given by the Torrington Co.
3. Hugh Griffith, Chattanooga, matched irons, awarded by Industrial Rayon Corp.
4. B. S. Hart, American Glanzstoff Corp., Chattonooga; golf bag, presented by Kaumagraph Co.
5. Bill Dupree, Marietta, Ga.; silver plate, given by Oscar Heineman Corp.
6. Joseph R. Morton, Tubize Chatillon Corp., Greensboro, N. C.; silver dish, Adamson Bros. Co.
7. George Blackwell Smith, Miller-Smith Hosiery Mills, Chattanooga; glassware, by Hampton Co.
8. William Murphey, Signal Knitting Mills, Chattanooga; silver pitcher, by Standard-Coosa-Thatcher Co.
9. Bill Jackson, of Chattanooga; silver brushes, Southern Mercerizing Co.
10. R. P. Shapard, Spalding Knitting Mills, Griffin, Ga.; silver tumblers, by Aberfoyle Mfg. Co.
11. H. T. Bryan, Jr., Champion Knitting Mills, Chattanooga; silver cocktail set, given by American Glanzstoff Corp.
12. George R. West, Dixie Mercerizing Co., Chattanooga; golf bag, awarded by Tubize Chatillon Corp.
13. R. D. McDonald, Ingram Mfg. Co., Chattanooga; kit bag, given by *Cotton*.
14. John Fowler, Cartersville (Ga.) Mills; silver vase, by Paramount Textile Machinery Co.
15. John Kain, Chattanooga; matched clubs, by Fidelity Machine Co.
16. Ralph Holt, Burlington, N. C., silver flask, by TEXTILE WORLD.
17. R. E. Miller, Cartersville, Ga.; Gladstone bag, by Johnston Mills Co.
18. Bert Cook, Aycock Hosiery Mills, South Pittsburg, Tenn.; clubs, given by Payson Yarn Co.

Members of Chattanooga Yarn Men's Association:

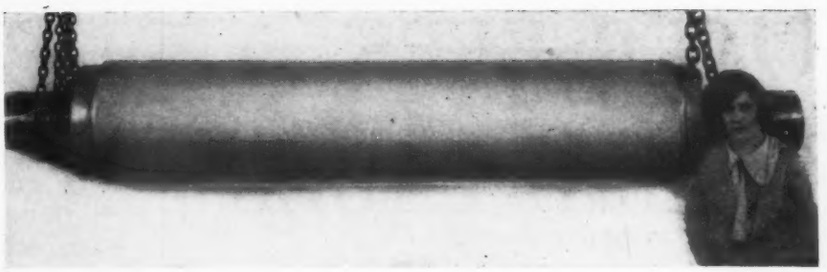
F. N. Belk, Johnston Mills Co.; E. D. Bryan, Tubize Chatillon Corp.; D. O. Blevins, Kaumagraph Co.; French Campbell, Standard-Coosa-Thatcher Co.; C. R. Ewing, Central Franklin Process Co.; R. H. Griffith, C. D. Gott Co.; H. E. Gosling, Hemphill Co.; B. S. Hart, American Glanzstoff Corp.; J. G. Hillborn, Cannon Mills; D. L. Hurlburt, Adamson Bros. Co.; C. L. Hall, Southern Mercerizing Co.; W. L. Jackson, Philadelphia Drying Machinery Co.; E. R. Kimball, Dixie Mercerizing Co.; A. S. Johnson; Wilbur S. Lawson, Standard-Coosa-Thatcher Co.; R. D. McDonald, Ingram Mfg. Co.; Tom Moore, American Yarn & Processing Co.; W. B. Purse, Tubize Chatillon Corp.; C. A. Snodgrass, E. Gerli & Co.; J. C. Woodall, Hampton Co.

R. H. Griffith, Dudley Bryan, Edward Elmore, Eugene Thomasson

Chas. Hall, Jr., David Blevins, R. C. Aycock, George Porges

Chas. Stokes, E. E. Pickard, J. B. Frierson, Rudolph Davenport

Wm. Murphey, Alfred Thather, John Crosinak, John Kain



Chromium-plated schreiner roll

CHROMIUM PLATING

Finds Increased Use in Textile Industry

By E. R. Granger
of Chromium Corp. of America

BECAUSE the coefficient of friction of chromium is 30% lower than that of any other metal and because of its ability to withstand corrosion, we find it particularly adapted for use in the textile industry. Chromium plate is less expensive than many other non-corrosive metals. It does not crack or chip like porcelain. It is easy to clean and will not tarnish. It resists oxidation to 1,350° F. These properties of chromium plate make it applicable to printing rolls, schreiner rolls, drying equipment, tensions, guides, and miscellaneous equipment. Although it may be applied to practically all base metals, chromium plate is especially effective over steel, copper, or nickel.

A thin deposit of chromium applied to the copper rollers used in the textile-printing industry will prolong the life indefinitely. It not only prevents small scratches and drags in the flat surfaces of the roll, which cause profit-killing shut donws; but it will produce a higher quality of printed goods with clearer detail, sharper lines, and cleaner blank areas. It also protects the raised portions from the abrasive action of the doctor blade and the inks. It is a common practice when the doctor blade has worn through the chrome, to stop the use of the roll immediately, have the chrome stripped off, and replate, thus preserving the design.

Chromium plating of embossing plates gives protection against corrosion and gives a sharper, clearer detail to the design, bringing out each finest line. It also adds luster to the finished product and prevents gums and foreign material from adhering to the plate.

Chrome-plated schreiner rolls will last much longer than the unplated steel rolls and will retain their high luster. The plating provides a rust protection which is so often needed, due to the changes in temperature and the carelessness of operators who put their perspiring hands on the rolls, leaving corroded imprints. Due to the hardness of the coating it will preserve the lines and aid in imparting a high luster to the cloth.

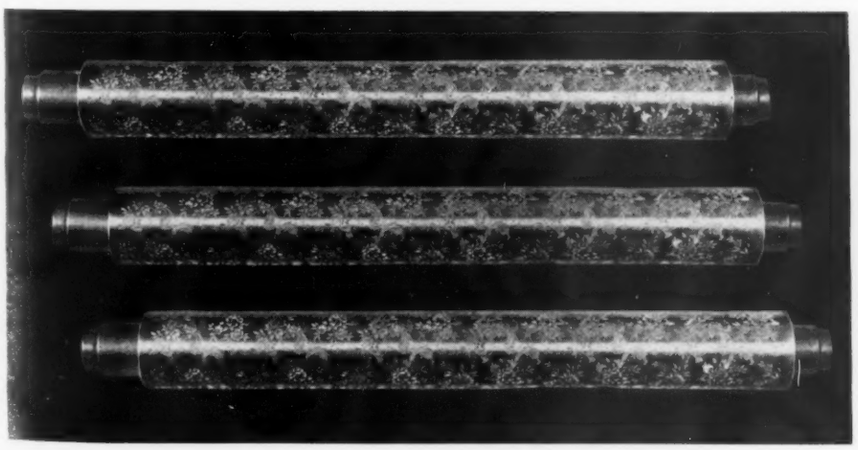
One company in the silk industry experienced considerable difficulty with copper drying cans, because it was unable to find a suitable covering. The cans had to be replated twice a year, as otherwise the copper would corrode and discolor the silk. Chrome-plated drying cans, on the other hand, have been in use for more than two years and have given absolutely no trouble either from surface stains or from clinging of sizing to the surfaces.

For dyehouse equipment chrome plate, since it will not crack or chip, is particularly desirable. Again, copper sizing kettles, troughs, and other equipment are plated to prevent corrosion, which tends to discolor the material.

There are many different styles of tensions, guides, and holders. Chrome plating on these not only gives a hard surface which will outlast certain other materials, but also gives the strength and smoothness which is so essential to this class of work.

There are also available the records of chrome-plated tensions that have given 100 to 500% more efficiency than unplated steel. Reeds are especially benefited by the use of chrome, because it will not fray the material and will withstand the abrasive action of silk and rayon yarn.

Among other types of equipment for which chrome plate is adapted are included drop wires, needles, carpet wires, pig tails, and doctor blades.



Printing rolls with chromium plating

OVERSEERS' ROUND-TABLE

THIS department offers a new subject for discussion each week and gives readers' comments on problems introduced during previous weeks. The subject which was opened four weeks ago is closed this week and a summary of contributed ideas is given on opposite page

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The Question of Rest Periods

Editor, Overseers' Round-Table:

I AM very much interested in the question of rest periods for the workers and hope that there will be a great deal of discussion.

As I understand it, the plan is not to shut down the machinery, but merely to have the worker take a definite rest every so often, and piece up what ends are down or start up the looms that have knocked off when the rest period is over. The problem, of course, is far different where the machine cannot be run without the constant attention of the operative, but in the case of a group of machinery, most of which will keep running over the rest period, I should think that the plan offers possibilities.

If the workers sit down a few minutes and perhaps chat sociably with fellow workers I should think that they would return to their work capable of more efficient operation. Monotony leads to carelessness and carelessness leads to a slowing down on the part of the help. I would like to see some letters from those who have given the subject some study in relation to the textile mill. JEAN TRIPPER

Placing Responsibility for Machinery Upkeep and Repair

Editor, Overseers' Round-Table:

PLACING THE responsibility for machinery upkeep on department heads seems to me to be the most practical solution of an admittedly debatable question. Overseers are specialists in their own particular fields and it is only fair to concede them the right of way in these fields. It does not necessarily follow that overseers are practical mechanics, but it does mean that they understand perfectly the relationship between the machine and the manufactured product.

In placing responsibility upon the overseer we must not overlook the fact that repairs and replacements mean expenses and unless the superintendent authorizes such outlays it is unjust to hold the overseer responsible for defects. Further, the mechanical department, when called upon, must work in a harmonious spirit and do the job exactly in accordance with the overseer's instructions.

It would be unjust to the overseer to hold him responsible without seeing that he had cooperation in carrying out the work, but by fostering a spirit of comradeship and unselfishness throughout the organization much will be done to combat the possible dangers and make the overseer's job pleasant, practical and beneficial. A. D. WILLIS

Bill and Pete Dis

"I DIDN'T notice you talking as much as usual at the overseers' meeting today, Pete," Bill said as the two overseers met at the mill gate. "What's the matter, old timer, has my great brain finally floored you?"

"Why, Bill, I'll always argue with you just to point out how wrong you are," Pete laughed, "but today I was thinking and worrying about something else."

"What's up, Pete?"

"Well, the super asked me to look around and pick out a real assistant. Said that it wasn't good to have too much depend on me in case I should be out sick for a few days. I've been wondering whom I should pick. Young Hank McKeown seems to be pretty wide awake and he learns fast, so I've more or less made up my mind that he'll be the one."

"I wouldn't pick Hank if I were you, Pete."

"Why not, Bill? It won't take me long to teach him and once I've trained him he could run things in good shape."

"There are several sides to the question, Pete. In the first place Hank isn't your best and most experienced operative and I think that there would be quite a bit of jealousy and hard feeling if you put him over the others even though he may be the brightest. In the second place this is a pretty tough world and everyone must look out for himself. Your chief value to the company is that you are doing something that no one else can do. If you have a crackerjack of an assistant it doesn't make you such a valuable cog. If I were you I'd take one of your older, steady-going workers as an assistant. It would be a nice thing to give such recognition to efficient operation and, after all, you won't be out much and the department can battle through those few days."

"There is another side though, Bill. If I have a good assistant then there will be no hesitation in

Changing Workers from One Machine to Another

Editor Overseers' Round-Table:

IN REGARD to changing workers from one machine to another, I am of the belief that it isn't the thing to do.

I don't mean to say that you shouldn't give a good worker a chance of a better job, if such a job is open, but I don't believe in just changing a worker for the fun of changing.

cuss Assistants

moving me about, perhaps to a better job. And furthermore, I like to encourage a bright young fellow like Hank."

"You're right about encouraging Hank, Pete, and if it were a question of picking someone to replace you all the time he might be the logical choice, but for just an assistant I think you would be wise to throw a little encouragement to the old reliable workers. And further, it's nice to be big-hearted, it's also nice to know that you are an important part of the concern and that it would be difficult to replace you."

"Well, I guess we'd better run along home, Bill. Thanks for your advice and I'll think it over. See you tomorrow."

"Right, Pete. So long."

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Do *you* think that assistants should be chosen for their ability as an operative or for their general intelligence and chance of further advancement?

Overseers and others are invited to discuss this and other questions brought up in the super's talks. Letters accepted and published will be paid for without regard to length. Brevity is desirable.

Summary of Discussion on Reporting Carelessness

The majority of contributions favored having the super or another overseer report to the department head rather than correct a worker directly, when he came upon carelessness in the plant. In a case of emergency, however, it was acknowledged that the worker should be spoken to at once to avoid the possibility of serious damage or injury. A fairly strong minority were of the opinion that carelessness was such a vital problem that the super was justified in stopping and speaking to the operative directly, being careful, however, to make his comments quietly and with dignity. This attitude was based upon the belief that a few words spoken at the time of a careless occurrence were of more value than a long lecture at a later time. It was generally agreed that another overseer should not assume this privilege which belonged only to the super.

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It wouldn't be long before your help would be dissatisfied with any job he or she were on. In addition, it is better to have your help good at one job, than "Jack of all trades and good at none."

K. R. CLEMENT,
Dominion Yarns, Ltd.

Editor, Overseers' Round-Table:

I DO not believe that workers should be changed from one class of machine to another, but I do think that the help should be rotated from one machine to another of the same group.

This is particularly true where the machines are of a different age. If some of the operatives are always kept on the new machines and the others stay on the older there is found to be friction and a cry of favoritism, even though the machines may be of the same model. It can often be proven that one machine is as efficient as the other, but if the operatives are on piece rate it is difficult to convince them that they can turn out as much work on the old machine, which possibly vibrates more and has some of the paint knocked off. To overcome this perhaps foolish notion on the part of the operatives it is easy to arrange things so that each worker is moved from one machine to another.

I think that what little trouble is caused in moving operatives about in the same class of machinery is more than offset by the better feeling which it generates.

BERT C. KANE

Methods of Reporting Carelessness Outside One's Own Department

Editor, Overseers' Round-Table:

THE QUESTION of reporting carelessness is one which arises periodically in every mill and often causes quite a bit of hard feeling. I think that if we could all look at the problem in a broad way the problem would automatically be removed. The principal objection to the super or another overseer correcting a worker seems to lie in the fact that the overseer whose department it is feels that his authority has been weakened. To my mind this is largely a matter of imagination. Everyone in the mill knows that the overseer is in direct charge of a department and the incident of another correcting one of his workers is, after all, a minor affair and has no real bearing on the question of authority.

If the super, in walking through my department, should suddenly stop and issue some orders to the workers I can do one of two things. I can become indignant and say that it is my job to issue orders and that if the super does it there is no use of my being there, or I can think it over and realize that the super is all wrapped up in the mill, probably hasn't stopped to think about the question of authority, and that the workers will think nothing of the incident. If I make a fuss about it the incident will be enlarged in the minds of all and I am placed in the position of thinking more about my own vanity than my real job, which is to get out the work in one way or another.

I am not in favor of carrying the correction of another's workers to an extreme, but I do believe that a few such incidents are absolutely harmless and even serve to emphasize cooperation.

E. A. ANTHONY

NEWS about MEN

W. HARRISON HIGHTOWER, widely known cotton mill executive and president of the Thomaston (Ga.) Cotton Mills, has been elected a trustee of the Georgia School of Technology, Atlanta, Ga. Mr. Hightower, who is a past president of the Cotton Manufacturers' Association of Georgia, is a graduate of Georgia Tech, class of 1908-9, and a classmate of L. W. "Chip" Robert, of Robert & Co., textile engineers, also a trustee of the school.

D. H. CONWAY, president of the Conway Knitting Mills, Oswego, N. Y., was elected a director of the New York State Mayors' Conference Association at the annual session held last week in Utica.

J. R. BLOOD, head of the Blood Knitting Co., Amsterdam, N. Y., has returned after spending the winter in California.

F. J. ASHE, head of the Ashe Mfg. Co., Rensselaer, N. Y., has been appointed a member of a newly organized industrial commission in that city in a campaign for civic development.

I. J. CAPLAN, president of the Colonie (N. Y.) Fibre Co., is on an extended motor trip to points of interest in Canada.

W. W. NEAL, president, Marion (N. C.) Knitting Mills has been nominated by the Democrats for the Legislature from McDowell County. Mr. Neal has heretofore served several terms in the North Carolina General Assembly.

HENRY SARGENT, Worcester, Mass., dealer in wool waste and formerly associated with Wolf & Co., New York and Boston, was a passenger on the S.S. "Fairfax" which was in collision with an oil tanker in Massachusetts Bay on June 10. He was rescued by a lifeboat and taken to Boston by the S.S. "Gloucester." Mr. Sargent is nearly 80 years old and widely known in textile circles in New England. He is now at his summer home at Westerly, R. I.

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BRUCE B. KING, who is associated with his father, ARTHUR S. KING, president of the A. S. King Silk Co., Ltd., Toronto, Can., and ELOISE WASHBURN, Worcester, Mass., were married in the latter city on June 14.

JOHN F. REARDON, agent for the Grosvenor-Dale Co., North Grosvenor Dale, Conn., presented the diplomas to the members of the 1930 graduating class of the North Grosvenor Dale high school on June 13.

DEXTER NORTH will be named to succeed DR. WARREN N. WATSON who resigned as chief chemist of the U. S. Tariff Commission June 4, to become secretary of the Manufacturing Chemists' Association of the United States. As Dr. Watson's assistant in the chemical division, Mr. North has been named acting chief pending permanent appointment. Dr. Watson joined the chemical staff of the Commission in 1919 and was appointed chief of the chemical division in 1926. His principal contribution during his service with the Commission is the annual census of dyes and other synthetic organic chemicals. Mr. North joined the chemical staff in 1921 and has been in charge of field activities in many of the flexible tariff investigations of chemical commodities.

MRS. LILLY MOREHEAD MEBANE, of Leaksville, N. C., widow of the late B. FRANK MEBANE, textile manufacturer and capitalist, of Leaksville and Spray, who died several years ago, was nominated for the House of Representatives from Rockingham County, for the North Carolina legislature, in the recent Democratic primary.

ROBERT H. GAEDE, of the Gaede Silk Dyeing Co., Paterson, N. J., was recently elected chairman of the New York Section of American Textile Chemists and Colorists.

JOHN F. TINSLEY, vice-president and general manager of the Crompton & Knowles Loom Works, Worcester, Mass., and MRS. TINSLEY, have returned from a month's vacation trip to the Pacific Coast and Honolulu.

GROVER C. BOYCE, vice-president, director and general manager of the Oswego Shade Cloth Co., of Oswego, N. Y., and also identified with the Joanna Cotton Mills, of Goldville, S. C., has been appointed district deputy grand master of Oswego Masonic District. Mr. Boyce is widely known in Masonic circles.

WALTER HUMPHREYS, secretary of the National Association of Wool Manufacturers, and family, sailed June 14, on the S.S. "San Bruno" of the United Fruit Co. for a 22-day cruise to Central America. This is the first vacation Mr. Humphreys has taken during the last three years.

MAYOR ALEXANDER CAVEN, secretary-treasurer of the Ideal Linen Mesh Co., Inc., Poughkeepsie, N. Y., heads the delegation from that municipality and was one of the speakers at the New York State Conference of Mayors and city officials at Utica last week.

J. C. JONES, JR., has been made assistant treasurer of the Aldora Mills, Barnesville, Ga.

EUGENE ROBBINS, cotton buyer for the Eureka Cotton Mills, Chester, S. C., will attend the North Carolina State College, at Raleigh, N. C., where he will pursue a course in cotton grading.

R. C. BOGER, JR., son of Robert Boger, president, Boger & Crawford, Philadelphia and Lincolnton, N. C., was seriously injured in an automobile accident, June 12, when his machine overturned outside of Salisbury, N. C. His condition is reported as improving. In the accident D. N. CRENSHAW, superintendent of the Boger & Crawford spinning mill at Lincolnton, lost his life, dying soon after the car overturned.

GEORGE EDSON SPOFFORD, JR., son of George E. Spofford, treasurer of the Androscoggin Mills, Lewiston, Me., and GERTRUDE MILLER MORSE, Augusta, Ga., are to be married in the latter city on June 26.

ALBERT L. SPRAGUE, purchasing agent for the Uxbridge (Mass.) Worsted Co., Inc., will represent the Rotary Club of Uxbridge, of which he is treasurer, at the 25th annual convention of the International Association of Rotary clubs at Chicago, June 23. Mrs. Sprague will accompany him on the trip.

LESTER BIRCHALL, for the last ten years accountant for the Thorndike Co., West Warren, Mass., has resigned to accept a similar position in Waltham, Mass.

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EVERETT TOUSSAINT has been appointed advertising manager of the Mohawk Carpet Mills, Amsterdam, N. Y., succeeding G. H. DURSTON, who has been promoted to the management of the Pacific Coast territory.

M. C. MAUNEY, formerly of Cherryville, N. C., has been elected secretary of the Osage Mfg. Co., Bessemer City, N. C.

JAMES L. DOTSON, cotton expert for Arcade Cotton Mills, Rock Hill, S. C., and MARY GRIER POE, of Rock Hill, were married June 12.

EDWARD S. CONWAY, former industrial relations manager of the Lawrence Felting Plant, Millville, Mass., has accepted a position in the New York office of the U. S. Rubber Co., for Winnsboro (S. C.) Mills, one of its branches.

C. B. GUNN, manager of the Choccolocco Cotton Mills, Anniston, Ala., has resigned.

J. V. SMEALLIE, for many years publicity manager of the Mohawk Carpet Mills, Amsterdam, N. Y., has been transferred to the St. Louis sales headquarters where he will serve in a similar capacity.

JOHN H. JUDGE has been appointed manager of the export department of Pacific Mills.

CHARLES P. GRIERSON has resigned his position as manager of St. George Woolen Mills, Ltd., St. George de Beauce (P. Q.), Can., and for the present is sojourning at his summer home at Balderson, Ont.

P. L. SHAEFER, general manager of the Caroline Mills, Inc., Carrollton, Ga., is acting as superintendent also at present.

GEORGE S. SIMMONS, assistant manager of the cost department of the Graton & Knight Co., Worcester, Mass., has been elected and installed president of Worcester chapter, National Association of Cost Accountants.

WILLIAM A. L. SIBLEY, a graduate of Georgia School of Technology at Atlanta, and now superintendent of Whitney Mfg. Co., of Spartanburg, S. C., and NANCY CRIGLER WILSON, of Spartanburg, have announced their engagement.

CHARLES F. ALEXANDER, formerly superintendent of Powdrell & Alexander, Inc., Danielson, Conn., who has gone to Los Angeles, Cal., to establish a branch plant for the corporation, made the trip from Columbus, O., to the Coast by airplane, after visiting his brother in Cleveland.

M. W. DRIVER, SR., has been made superintendent of the Delta Land Cotton Mills, West Helena, Ark., succeeding CHAS. E. LALINE.

CAPT. H. D. LEONARD, formerly mechanical superintendent of the Pacific Mills company, which operates large plants in both Spartanburg and Richland Counties in South Carolina, and who has recently been identified with Standard Looms, Inc., of Spartanburg, has resumed employment with the Pacific Mills company at the Lyman (S. C.) Division. He will be identified with the research department.

H. H. BROWN is now superintendent of the Autauga Cotton Mills, Prattville, Ala.

H. E. CLAYTON, superintendent of the Scottsboro (Ala.) Hosiery Mills, Inc., has resigned.

ARTHUR GOLDTHORPE, superintendent of Somerville (Conn.) Mfg. Co., has resigned his position, effective Sept. 1, completing 37 years of service.

E. R. LEHMAN is now superintendent of the Langdale (Ala.) Mill of the West Point Mfg. Co.

JAMES T. NOONAN, for several years president of the Employes' Council of the Lancaster Mills, Clinton, Mass., until the recent closing of the plant, has announced his candidacy for the democratic nomination for representative to the Massachusetts Legislature from that district.

R. W. LEWIS, superintendent of the Martinsville (Va.) Cotton Mills, has resigned.

JOHNSTON M'CORKLE, formerly connected with Fulton Bag & Cotton Mills, Atlanta, is now superintendent of the Scottdale (Ga.) Mills.

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ROBERT A. S. REOCH, for a number of years superintendent of the print works department of Pacific Mills, at Lawrence, Mass., is now general superintendent. GERALD CHAPIN, assistant superintendent, has been promoted to the superintendency, while C. F. SMITH, office manager, has been made assistant superintendent, succeeding Mr. Chapin.

J. F. YOUNG, JR., has been made superintendent of the Helen Mills, Huntsville, Ala. He was formerly secretary.

ARTHUR A. ANDERSON, a foreman at the Clinton, Mass., works of the Wickwire Spencer Steel Co., and ALICE M. LANGLOIS, an employe of the Bigelow-Sanford Carpet Co., Clinton, were married in that town on June 14.

O. E. BISHOP, head of the day weaving department of the Balfour (N. C.) Mills is recuperating following an operation for appendicitis.

WALTER K. COLE has accepted the position as overseer of dyeing for the Firth Carpet Co., Firthcliffe, N. Y. Mr. Cole comes from Amsterdam, N. Y. where he was formerly employed.

WILLIAM E. SMITH, overseer for the Ware (Mass.) Woolen Co., left on June 14 for St. George de Beauce, Quebec, where he will join the office force of the St. George Woolen Mills, Ltd., for several weeks. Mrs. Smith accompanied him to Canada.

CHARLES H. WEYMOUTH, master mechanic for the Fisher Mfg. Co., Fisherville, Mass., has been appointed first assistant engineer of the Grafton, Mass., fire department.

A. J. WRIGHT, second hand in the twister room at the Rockfish Mills, at Hope Mills, N. C., has resigned.

MRS. LILLIAN MUSGRAVE has resigned her position in the office of the Palmer mill of the Otis Co., Three Rivers, Mass., and left this week to join her husband, Charles, who is an overseer in a Pawtucket, R. I., mill.

HARRY ENGLE, foreman of the finishing department of the Bigelow-Sanford Carpet Co., Amsterdam, N. Y., is confined to the city hospital from injuries received in a motor accident.

N. C. LANE, overseer of weaving at the Saratoga-Victory Mills, Albertville, Ala., has resigned.

P. H. MANNING has taken the position as overseer of carding for the Dedham Mills, East Dedham, Mass. Mr. Manning comes from Franklin, N. H.

CYRIL PARENT, overseer of weaving at Lincolnsfield Mills, Inc., Lincoln, Me., has resigned.

W. C. PRICE is now office clerk in charge of the shipping at the Wilbur Cotton Mills, Inc., Troy, N. C.

THOMAS J. SIMONS has taken the position as overseer of finishing for the Homestead Woolen Mills, West Swanzey, N. H. Mr. Simons was formerly employed at the Yorkshire Worsted Mills, Lenni Mills, Pa.

VIRGIL ROBERTS is now second hand in napping and inspecting at the Arnco Mills, Newnan, Ga.

B. R. WHITE has been elected cotton weigher for Sumter (S. C.) County to succeed the late HENRY HILL.

HERBERT WORSMAN, of Lawrence, Mass., is in charge of finishing at plant of Amos Abbott Co., Dexter, Me.

JOSEPH SCHMANSKA, former overseer of dyeing for the Putnam (Conn.) Woolen Co., has accepted a similar position in Tennessee.

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T. N. MULLINS is now yard man at the Martel Mills, Inc., Valley Falls Mill, Spartanburg, S. C.

W. HARRY WYLIE, who has been connected with the southern offices of the Crompton & Knowles Loom Works, of Charlotte, N. C., has resigned.

J. E. YOUNG is now master mechanic at the Arnco Mill, Newnan, Ga.

J. A. WESTLIN has resigned as head of the production section of the General Electric Co., Schenectady, N. Y., to take a similar position with a subsidiary.

NEWS about MILLS

Cotton

Eagle & Phenix Cotton Mills, Phenix City, Ala. Work has been practically completed on the installation of modern plumbing fixtures at the village here. Sewers, pipes and septic tanks were installed for 130 houses in the mill village.

Ninigret Division of Fisk Rubber Co., Jewett City, Conn., will be closed for an indefinite period as soon as cotton in process is run off. Complete closing by July 1 is expected. The plant was operated with day and night shifts of about 400 employes.

Grosvenor-Dale Co., North Grosvenor Dale, Conn., will not join the proposed merger with the Bancamerica-Blair Corp., according to John F. Reardon, agent.

Thorndike Co., West Warren, Mass., is planning to dispose of its several mill buildings by public auction shortly. The buildings to be offered include No. 1, No. 2, No. 3, weave shop, dye house, machine shop, the new mill and a storage building. Obsolete machinery is being dismantled, and all modern equipment is being retained. The cotton division of the plant is in process of liquidation, the ticking department having recently been taken over by the Otis Co. It is said that there are prospective buyers for portions of the plant.

*__Fairhaven Mills,__ New Bedford, Mass., representing an assessed valuation of $1,900,000 were sold June 10 for $190,000. This amount represented the purchase of five large brick buildings and several smaller ones. Fred W. Greene, New Bedford, was the buyer. Fairhaven (Mass.) property, comprising 15 acres of land, was bought by Charles S. Ashley for $1,600. It was purchased from Mr. Ashley by Barney Seitz, New Bedford, for the same figure.

*__York Mfg. Co.,__ Saco, Me., stockholders' meeting held June 12 was adjourned by Pres. F. C. McDuffie until June 26, at the request of the **New England Industries, Inc.,** which has acquired the business. The new owners plan to install 800 broad looms and make changes involving a total expenditure approaching $1,000,000. Seventy per cent of the stock has been deposited and date for depositing has been extended 60 days from June 9.

Groveville (N. J.) Textile Mills, Inc. Gustave L. Goldstein, Trenton, N. J., receiver for this company, has issued a call for all claims against the company, on or before July 6.

Mount Holly (N. J.) Textile Co., is planning rebuilding of portion of mill destroyed by fire, June 9, with loss reported at close to $90,000, including equipment, finished products, etc.

Hind & Harrison Plush Co., Clark Mills, N. Y., is meeting difficulty in having Public Service Commission approve sale of its hydro-electric power interests to the Utica Electric Power Co., as it is claimed that the valuation is excessive.

Dunlop Tire & Rubber Corp., Utica, N. Y., cord tire fabrics, has increased operations and is now running overtime in some departments.

Manville Jenckes Co., Gastonia, N. C., which has for the last few weeks been operating only part time, is now in full operation producing tire fabrics.

Dilling Cotton Mills, King's Mountain, N. C., manufacturing both cotton and silk goods, have purchased 74 new silk looms.

Rhodiss (N. C.) Mills Co. is having the spinning equipment in its plant overhauled by the Southern Spindle & Flyer Co.

Arista Mills Co., Winston-Salem, N. C., has had its old oil spraying equipment replaced with Borne Scrymser Co.'s 1930 model.

Parker Mills, Warren, R. I., are operating on a 48-hour week schedule for the first time in two months. During April and May the plant was operating only three days a week.

Blacksburg (S. C.) Spinning Co.'s assets are $241,870.87 and liabilities $236,714.45, according to the schedule filed before H. E. DePass, referee in bankruptcy, by Carl Hart of York, S. C., trustee for the bankrupt mill. Secured claims amount to $92,900.71, and unsecured claims total $136,959.62, the schedule discloses.

Cheraw (S. C.) Cotton Mills recently placed a contract with the Bahnson Co., Winston-Salem, N. C., for the installation of humidifiers in their plant.

Blair Mills, Belton, S. C., are adding 16 sewing machines and an automatic buttonhole worker for the manufacture of terry and flannel bathrobes. This will double the capacity of the plant, and 50 additional girls will be needed when this equipment has been put in place.

Fort Mill (S. C.) Mfg. Co., plants Nos. 1 and 2, posted notices of curtailment beginning June 16. This provides for a full day time schedule during which the day hands and night hands will share equally.

*__Globe Mfg. Co.,__ Gaffney, S. C., which is in bankruptcy, has postponed sale of its property from July 7 to July 10, according to announcement of Henry C. Moore, trustee in bankruptcy. The sale will be held on the morning of July 10 and on the afternoon of the same day the common creditors of the Globe company will meet before Referee H. E. DePass in Spartanburg, S. C., and confirm the action of the trustee.

Pageland (S. C.) Cotton Mills, with offices at Charlotte, N. C., have changed their name to **Pageland Thread Mills.** No other changes are contemplated.

Pelzer, S. C. Work of installing a complete sewerage system in the 1,100 dwellings of the textile village of the **New England Southern Mills Corp.,** is to begin at once, according to J. W. Kelly, general manager, who estimates that the cost will approximate $250,000 or more.

Halifax Cotton Mills, Inc., South Boston, Va., following a suspension of several weeks, have begun operating on a half-time schedule, it is said.

•Indicates previous mention of project.

Wool

American Woolen Co., Lebanon, N. H., has resumed production at its local Mascoma Mills, and will continue on an active schedule for several weeks to come. Close to normal working force is employed.

Mohawk Carpet Mills, Amsterdam, N. Y., report orders in the chenille departments so far this year running 20% ahead of last year.

Firth Carpet Co., Auburn, N. Y., has taken on additional workers and is now running near capacity.

Waterloo (N. Y.) Mills, Inc., are operating full capacity with two shifts, manufacturing automobile cloth. A few months ago the plant was destined to be dismantled and closed, but local citizens and operatives raised $140,000. Those who subscribed, as well as those who are employed received first mortgage bonds.

Yorkshire Worsted Mills, Lenni Mills, Pa., men's wear worsteds, are operating all of their looms, as well as 20 outside looms, on a full day-and-night basis, in order to supply the demand for their merchandise.

Dominion Combing Mills, Ltd., Trenton, (Ont.) Can., now in bankruptcy, will net shareholders from 25c. to 30c. on the dollar, according to the courts.

Knit

Tuscaloosa (Ala.) Hosiery Mills, Inc., which completely suspended operations more than a month ago, have resumed operations with a full time running program of five-and-one-half days a week.

Champion Hosiery Co., Inc., Wilmington, Del., has filed notice of change in company name to the **Wilmington Hosiery Mills, Inc.,** continuing operation of local plant at Front and Orange Sts.

Mystic Knitting Co., Medford, Mass., has been formed with a capital of $50,000, to take over and operate local company of same name, with mill on Ship Ave. William Horstmeyer, Jr., is president and treasurer of the new company. Others interested include George L. Ellsworth and William J. Sinclair.

Wilkes Hosiery Mills Co., No. Wilkesboro, N. C., has awarded contract for an addition to its dye house, to Foster

and Allen, local contractors. This new addition, when completed, will practically double the present size of the dyeing plant.

Bear **Brand Hosiery Co.,** Beaver Dam, Wis., has awarded general contract to the Immel Construction Co., 19 West Division St., Fond du Lac, Wis., for a new four-story mill addition, 85x99 ft.

Silk

M. **Salsberg & Sons Co.,** Putnam, Conn., has added 50 additional new looms, making a total of 114, which are in operation day and night.

Huguet Silk Co., Hornell, N. Y., is running on a capacity schedule with day and night shifts, and will continue on that basis for an indefinite period.

Penn Silk Mills, Inc., 455 Seventh Ave., New York, have filed schedules in bankruptcy, showing liabilities of $619,-631, and assets, $123,880, consisting of machinery and fixtures in mill and stock of merchandise.

Susquehanna Silk Mills, Marion, Ohio, have resumed full time production at their local plant, following a curtailed schedule for some weeks. It is understood that a night force will become effective at an early date.

Reidsville, N. C. Francis B. Kemp, of Reidsville, was appointed ancillary receiver for the **Klotz Silk Mfg. Co., Inc.,** of New Jersey, which has a plant here, by Federal Judge Johnson J. Hayes, in district court, at Greensboro. This action, which followed the placing of the Klotz company in receivership in the New Jersey courts June 10, was made upon petition of the First National Bank of Reidsville.

Water Gap Throwing Co., East Stroudsburg, Pa., is the name of a new concern organized to produce grenadine and crepe twist yarns, with the possibility that it may later produce rayon crepe yarns. The company has taken over the throwing mill that was formerly occupied by the **Amalgamated Silk Corp.,** Brown St., and will operate approximately 49,000 spindles. Water Gap Throwing Co. is a new company in which it is reported Albert J. Pfeiffer, New York, has a controlling interest. Yarns produced by Water Gap firm will be sold through Albert J. Pfeiffer Co., New York.

***Brupbacher Silk Mills, Ltd.,** Valleyfield (Que.), Can., have awarded contract for the construction of their textile plant at Valleyfield to the Atlas Construction Co., Ltd., of Montreal. Plans provide for the erection of three units, one of which will be three stories and another one story, 250 ft. long, with an office building two stories. D. J. Spencer, of Montreal, is architect.

Rayon

Skenandoa Rayon Corp., Utica, N. Y., now has 668 employes on the operating force, an increase from 450 as of May 1, and if business conditions warrant, it is hoped to employ a total of between 700 and 800, by Aug. 1, as announced by Burne Gordon, Jr., vice-president and general manager. Units now in operation eventually will be doubled in size, but at present plans for enlargement have been suspended.

***American Glanzstoff Corp.,** Elizabethton, Tenn., has work nearing completion on second unit of local rayon mill, and is said to be planning to place the new mill in service late in the summer, with large increase in working force.

*Indicates previous mention of project.

Finishing

Arnold Print Works, No. Adams, Mass., has been operating on full daytime basis as well as keeping ten machines busy at night. The Jones division at Adams has been running at practically daytime capacity.

Valley Finishing Co.'s (Pleasant Valley, N. Y.) plant which last week was sold under foreclosure to satisfy a first mortgage held by the Bank of Millbrook, N. Y., is to be re-opened shortly as a textile finishing concern under the direction of Julius Buchman, who has bought the property. Merlin E. Tice, formerly associated with the Valley Finishing Co., and William E. McKeown will be in active supervision of production. It is expected that operation of the plant will be inaugurated by July 1. It has been closed for several months, lack of orders having been given by the former concern for the inactivity. Approximately 50 persons were employed when final operations ceased in February.

Paramount Finishing Corp., 60 Broadway, Brooklyn, N. Y., has leased a floor in the building at 33rd St. and 37th Ave., 70x450 ft., and will occupy for a new dyeing and finishing mill.

***Valkone Dye & Finishing Works, Inc.,** Philadelphia, Pa. On June 20, 1930, at 10 a.m., application will be made for leave to sell the assets of the company at private sale to S. Sacks, agent. This will include the buildings now occupied by the plant at Howard & Oxford Sts., subject to a first mortgage of $70,000, and all the machinery and equipment now used by the plant and not under lease, for the sum of $39,900.

Miscellaneous

California Thorn Cordage Co., Inc., 850 East 111th Place, Los Angeles, Cal., has filed plans for a one-story sawtooth roof type mill addition, 60x60 ft.

Medway, Mass. Fred Simpson has leased the lower mill of Max Finkelstein and as soon as the machinery is put in shape will operate as a shoddy mill, doing business for the woolen mills in that section.

Cable Flax Mills, Schaghticoke, N. Y., has sold its machinery to M. Tolkin, of Cohoes, N. Y., who is now dismantling the plant. The property has been idle for two years.

Moorhead Mattress Co., Fargo, N. D., has begun work on its plant, which was damaged recently by fire, and the company expects to reopen just as soon as completed.

United States Asbestos Co., Manheim, Pa. On June 11 fire destroyed one building and damaged a portion of this mill. An official estimate of loss has not been announced. The damage will be replaced.

Textile Patents

ARTIFICIAL silks, Treatment of. 1,761,707. Rene Clavel, Basel-Augst, Switzerland.

AXMINSTER looms, Intermittent needle motion for. 1,760,960. Arthur P. Paine, Worcester, Mass. Assigned to Crompton & Knowles Loom Works, Worcester, Mass.

AXMINSTER looms, Needle motion for. 1,761,277. Oscar V. Payne, Worcester, Mass. Assigned to Crompton & Knowles Loom Works, Worcester, Mass.

AXMINSTER looms, Tube frame for. 1,760,-942. George P. Findlay, Worcester, Mass. Assigned to Crompton & Knowles Loom Works, Worcester, Mass.

AXMINSTER looms, Tube frames for. 1,-760,963. William W. Robertson, Worcester, Mass. Assigned to Crompton & Knowles Loom Works, Worcester, Mass.

COTTON harvester. 1,762,045. Arthur E. Benson, Clarendon, Tex.

COTTON picker or lapper, Pneumatic. 1,-761,493. Ernest Harold Rogers, Atlanta, Ga.

DOBBY looms, Rack for fingers of. 1,760,-909. William E. Lundgren, Worcester, Mass. Assigned to Crompton & Knowles Looms Works, Worcester, Mass.

DRAWING frames, Stop motion for. 1,761,-413. Walter J. Scott, Woonsocket, R. I.

DYEING machine. 1,761,562. Florent Hinnekens, Paterson, N. J. Assigned to Van Vlaanderen Machine Co., Paterson, N. J.

FABRICS, Apparatus for treating. 1,761,563. Florent Hinnekens, Paterson, N. J. Assigned to Van Vlaanderen Machine Co., Paterson, N. J.

FEELER mechanism. 1,761,817. Randolph Crompton, Worcester, and Charles E. Knowleton, Grafton, Mass. Assigned to Crompton Inc., Boston, Mass.

FULL-fashioned knitting machines, Springbar-operating mechanism for. 1,761,381. Melchior Zwicky, Berkshire Heights, Pa. Assigned to Textile Machine Works, Wyomissing, Pa.

HOSIERY-drying-form machine. 1,761,296. Paul Guggenheim, Philadelphia, Pa. Assigned to Philadelphia Metal Drying Form Co., Philadelphia, Pa.

HOSIERY pressing tray. 1,760,917. Edward J. Schremp, Beachurst, Long Island, N. Y. Assigned to the Prosperity Co., Inc., Syracuse, N. Y.

LOOM, Circular. 1,761,293. Robert G. Clark, Brooklyn, N. Y.

LOOM magazines, Thread controlling device for. 1,760,925. William M. Wattie, Worcester, Mass. Assigned to Crompton & Knowles Loom Works, Worcester, Mass.

LOOMS, Box motion for. 1,760,950. William E. Lundgren, Worcester, Mass. Assigned to Crompton & Knowles Loom Works, Worcester, Mass.

LOOMS, Feeler mechanism for. 1,761,618. Harry A. Davis, Hopedale, Mass. Assigned to Draper Corp., Hopedale, Mass.

LOOMS, Feeler mechanism for. 1,761,621. Clare H. Draper, Hopedale, Mass. Assigned to Draper Corp., Hopedale, Mass.

LOOM shuttle. Automatically threading. 1,761,617. Harry A. Davis, Hopedale, Mass. Assigned to Draper Corp., Hopedale, Mass.

LOOM shuttles, Cop skewer for. 1,763,614. Frederic E. Douglas, Hopedale, Mass. Assigned to Draper Corp., Hopedale, Mass.

LOOMS, Starting gage for. 1,763,504. Cleveland Caprio, Hawley, Pa.

PACKAGE for yarn or the like. 1,762,386. Albert B. Collingbourne, Elgin, Ill. Assigned to Collingbourne Mills, Inc., Elgin, Ill.

PACKAGE winding machine. 1,763,246. John O. McKean, Westfield, Mass. Assigned to Foster Machine Co., Westfield, Mass.

SHUTTLE tension. 1,763,547. Fred E. Adams, Providence, R. I. Assigned to U. S. Bobbin & Shuttle Co., Providence, R. I.

SILK, Process for degumming. 1,763,112. Leo Wallerstein, New York. Assigned to Wallerstein Co., Inc., New York.

SPINNING frames, Spindle drive for. 1,762,-351. Joseph W. Randall, North Andover, Mass. Assigned to Davis & Furber Machine Co., North Andover, Mass.

STOCKING. 1,762,601. Ethel M. Wall, Omaha, Neb.

TENSION device. 1,762,476. Lewis T. Houghton (deceased), Worcester, Mass. Assigned to John M. Houghton and Olive M. Lambert.

WARP knotting machine. 1,762,656. Oskar Fischer, Plauen/Vogtland, Germany.

WEAVING loom, especially for heavy webs such as metallic wire webbing. 1,762,393. Bernhard Hein, Cologne, Germany. Assigned to Le Treillage Ceramique Francais, Paris, France.

WEFT-inserting mechanism. 1,762,377. Francis E. Ashton, Chester, Pa. Assigned to Aberfoyle Mfg. Co., Chester, Pa.

Questions and Answers

We undertake to answer, free of charge, to the best of our ability, questions pertaining to textile matters received from any regular subscriber to TEXTILE WORLD. We do not undertake, however, routine analysis of yarn or fabric, or investigation involving unusual expense.

Inquiries should give the fullest information and data possible. In the case of damage to material, a sample should be sent. All inquiries must be accompanied by the name of the person inquiring, not for publication, but as evidence of good faith. The identity of those seeking information on technical subjects will not be disclosed.

Letters expressing opinions or voicing criticism are cordially invited. These will be signed by the correspondent's name unless the letter itself contains a request that the name be withheld.—EDITOR.

Printed Rayon Webbing

Technical Editor:

We are enclosing herewith small samples of printed rayon webbing. We are using a transparent printing ink for this work, but do not seem to be obtaininig satisfactory results. The ink does not seem to penetrate well enough and it also kills the luster of the rayon. We are wondering if there is any special treatment to which this class of work should be subjected to get a better result; that is, good penetration and retention of the luster of the rayon. Any information that you can give, either as to the proper materials to use or special treatments that would be of advantage, will be very much appreciated. (7198)

This particular sample appears to be a colored lacquer, which either lacked body enough (i.e., was too fluid) to make a continuous colored film or was broken up or rubbed off after printing. The material does not appear to be dyed. The lack of luster is due to the broken coating of foreign material. Presumably ordinary printing methods are not permissible.

Inks of this sort are really colored lacquers. The better ones contain dyes that are soluble and also fast to light. In this case there seems to be more of the binding material than is really necessary. With more dye, more of the solvent, and less of the solids you should get the results you desire. We suggest you take this up directly with the manufacturer of the ink. There are good lacquers of this class, which are extensively used for air-brush work in decorating both silk and rayon materials. It should also be noted that when you get penetration you must sacrifice sharpness of outline.

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Small Spots on Full-Fashioned Hosiery

Technical Editor:

We are enclosing herewith a six-thread, Grand XX, 48-gauge pair of stockings. The fabric in our estimation does not look right, and it is our desire to have you explain wherein the trouble lies.

The silk is backwound wet with a 2% solution of sulfonated olive oil. To this solution we add 1 oz. of olive-oil powdered soap, which is brought to a solution in a separate pail and then added to the above solution. The silk is then taken to the knitter humidor, where it passes over a roll wet with a solution of Silklubric No. 26. This solution is made heavy enough to carry it over the roll and is composed of approximately 6% Silklubric No. 26 and 94% soft water. It is our belief that the solution is not correct, either on the backwinder or knotting machine.

We would also like to know what is the correct solution for running three-thread 94%, five-thread XXX, and six-thread Grand XX. (7218)

The defect in this hosiery is not the usual defect which we attribute to improperly backwound silk; i.e., sleazy stitches. The surface of the goods, both inside and out, is remarkably free from fuzz and shows little or no broken filament, which is proof that the threads are well lubricated. The evenness of the silk is extremely good for a hose so sheer. There are few bands which show up in the upper calf of the leg. The feel and handle of the stocking is most excellent.

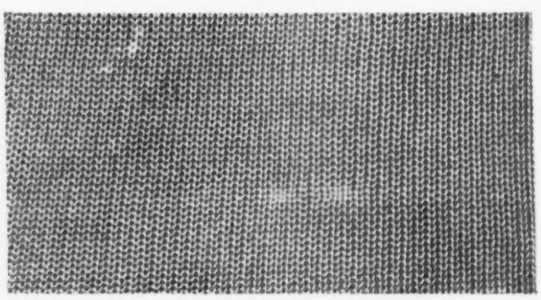
The defect as we see it appears to be a short drawn stitch here and there, which at first we were inclined to think was a pull. From a casual examination one would attribute the cause of this to the machine in which the goods were boiled off. If they were boiled off in a beaker in the laboratory, the trouble might have been caused by the use of a sharp glass rod.

A more careful examination under the microscope, however, shows these to be a flake-like deposit of a soap or a soap-like substance. This has become imbedded in the stitch and has not come out in the boil-off. Even pure soluble soaps in a fine undissolved form do not readily come out in the boil-off, unless the boil-off be severe; and this hose could not be considered as boiled off too much.

From the formulas you have given us we are inclined to believe there are three possible places where this deposit might have been formed.

In the first place, there is a chance that the powdered olive-oil soap is dissolved only partially. This material is so finely divided that there is a possibility that some of it might get into the solution in the undissolved form and escape detection. A very small flake could spread to about the size of the spots if softened up but not put into a true solution. We would suggest boiling this soap 15 or 20 min. to insure complete solution, and we would have the water boiling before we added the soap. As a final precaution, we would strain it through cheese cloth, to be sure that no undissolved soap found its way inth the backwinding trough.

Many mills do not add soap to sulfonated olive oil. Sulfonated oils are generally finished on the free fatty-



A little hard, drawn spot occurs here and there which is a flake of soap-like substance

acid side, and a soap solution is always alkaline, due to hydrolysis. When these two unite there may be a danger of a curd forming.

The second place where these soap-like flaky curds could form is in mixing up the Silklubric 26 solution. It is true that this product is a liquid, but it does not mix as readily with cold water as it does with hot water. When mixed with cold water, there are some portions which do not mix readily because the chill of the water hardens them up. When mixed with hot water, these are dissolved and enter a perfect solution.

Many mills have used Silklubric 26 extensively and obtained better results when using hot water. We might mention the fact that it is not necessary to use as much as you are using. For five and six threads it is satisfactory to use 4 oz. to the gal. which is 4 to 128, or about 3%. For a three-thread tram it is sufficient to use 3 oz. to the gal. Some mills obtaining satisfactory results use Silklubric 26 in the backwinding machine and nothing but clear soft water on the knitting machines.

You should be very careful to see that no scum or lint forms on the roller or in the trough. You should clean these parts each week.

The third possible cause may lie in the fact that you are using a galvanized pail to mix up your solutions. When these are used, there is always a coating of zinc soap which forms on the sides of the pail. This is rubbed off and finds its way into the machine and subsequently onto the silk. This is very hard to remove. White enamel pails are desirable for use in making these solutions.

◆

Stain in Silk Crepe

Technical Editor:

We are enclosing herewith a sample of crepe. You will note that it contains small dark spots which follow the pick. Apparently the stain occurs on one twist only, although there is a possibility that it may occur on both twists and escape our attention.

It is the opinion of our weaving department that these spots are caused by either oil or some other foreign substance dropping on the single thread in the throwing plant. After these dirty single ends are twisted with the high number of turns required in crepe, it is impossible for the dyers to remove it in either the ordinary boil-off or with bleaching.

The throwing department disclaims responsibility and asserts that the stain is caused in the weaving department through spools or cops dropping into oil on the floors, or possibly from some machine depositing this oil through a splash or leakage. The weaving department naturally states that such a condition does not exist and furthermore asserts that should such a condition exist, any oil or dirt deposited on the crepe twist on the outer surface will easily boil off. It is our impression that a number of dyers also make this contention. (7181)

We have carefully examined the sample of crepe for dark spots which seem to occur in one twist only. This condition is quite natural, as there are two shuttles running one to the left and one to the right; one quill may be dirty and the other not, thus staining only one twist.

In our opinion this stain is caused by the throwing department, either from use of an improper processing oil, which opens fibers or threads, causing dirt and grease to collect; or by machines throwing oil; or by careless handling. This dirt seems to be twisted right into the fiber, for after carefully unwinding the twist, the dark spot can be removed by putting it on blotting paper and rubbing with a little gasoline.

However, the weaving department should check up for machines throwing oil, and for dirty loom boxes. It should be made certain that the shuttles do not bind the filling in the boxes. If these suggestions are followed, the marks should be eliminated.

THOUSANDS of inquiries are handled annually by the Technical Editors. In order that as many readers as possible may benefit from this service, we select problems of general interest for publication each week.

◆

Napped Knitted Fabrics

Technical Editor:

I was handed a piece of fabric like the larger piece I am enclosing and was requested to raise a nap similar to the nap on the smaller piece. Am I right in thinking the yarn is too hard and is twisted too tight for such a nap? Any assistance you can give me will be greatly appreciated. (7182)

There are several points of difference between these two pieces of fabric; viz., the small napped piece was made on a warp or Raschel machine, while the larger piece was made on a plain jersey circular or flat machine. The warp fabric has nothing but the stitch thread in it, while the jersey fabric has an extra filling thread. The warp fabric has been bleached, while the jersey has not. We should judge the warp fabric has considerable less twist in the yarn than the jersey. We should say that the twist and lack of bleaching would make napping of the larger piece more difficult.

◆

Is Contraction Allowed for in Making Ply Cotton Yarn?

Technical Editor:

Has the cotton yarn trade a standard practice to cover the following, and if so, what is it? When a yarn is to be sold in ply, is the single yarn spun to count or is it spun finer so that the twisted yarn (heavier on account of contraction) will test correctly to count? For example, if a yarn were purchased as 9s, three-ply, should it test to single equivalent of 3s or should it be heavier, and if so, how much heavier? (7227)

As far as we know there is no fixed standard for this practice. We believe it is generally considered that the ply yarn should have the size of an equivalent singles. That is, a 9/3 should size as a 3s. What study we have made of this subject leads us to feel that there is a tendency to keep to the heavy side to keep the cost

of spinning, twisting, and winding as low as possible.

The following table contains the result of a test made on a variety of yarns to see what the actual counts were. These tests were made under standard conditions of 70° F. and 65% relative humidity:

Actual Counts			
Sold	Sized	Sold	Sized
2/16	2/16.1	2/ 36	2/ 35.6
2/17	2/17.75	2/ 40	2/ 39.6
2/20	2/19.6	2/ 40	2/ 39.4
2/20	2/19.2	2/ 40	2/ 39.6
2/20	2/19.7	2/ 40	2/ 40.6
2/23	2/23.0	2/ 40	2/ 40.1
2/24	2/25.0	2/ 45	2/ 43.6
2/26	2/25.7	2/ 50	2/ 48.4
2/26	2/25.2	2/ 54	2/ 53.4
2/28	2/27.3	2/ 56	2/ 54.8
2/28	2/28.0	2/ 58	2/ 57.9
2/28	2/28.6	2/ 58	2/ 56.0
2/28.5	2/28.4	2/ 60	2/ 59.0
2/30	2/29.4	2/ 60	2/ 57.9
2/30	2/29.9	2/ 60	2/ 58.0
2/30	2/29.0	2/ 80	2/ 79.0
2/35	2/35.0	2/100	2/102.4

◆

Running Bleached Rayon Noils with Cotton

Technical Editor:

One of our mill friends has been endeavoring to run bleached viscose noils together with cotton into singles yarn suitable for his hosiery department. His trouble has been in getting a suitable even run of yarn, and he would like information as to how he should run this, and also what new machinery will be necessary to do it properly. The mill is at present equipped with cotton cards and he prefers to run cotton system. (7184)

Ordinarily commercial spun-staple yarns are made from a cut rayon specially manufactured for spinning. We are of the opinion that the noil from ordinary rayon fiber will be too coarse for this work. Also, it will probably need to be cut to the proper staple. Spun-rayon yarns are made on the cotton system with certain modifications which the mills do not divulge. The usual cotton machinery should be satisfactory if properly adjusted. This is largely a matter of experiment, and those who have found the proper adjustments do not tell what they are and will not show visitors the rooms running this material.

◆

Finishing Rayon Voile and Georgette Crepe

Technical Editor:

We have heard of so many different methods of finishing rayon voiles and georgette crepe that we should like to have your recommendations as to the best method to process these fabrics. Any data which you will submit will be greatly appreciated. (7188)

In any other class of goods the finishing is just what the name implies and is the last operation, but in rayon fabrics the finish depends largely on the treatment preliminary to dyeing. When we are dealing with silk we must take account of the natural gum of the fiber as well as the soap and oils added by the throwster and remove these before attempting to dye the fabric. In the case of rayon fabrics the warps are always well sized and the filling contains both oils and throwster's tints, sometimes called sightners. All this foreign material must be removed before dyeing. If starch alone has been used on the warp, it may be removed by a run through diastase solution, but as there are many other sizings that do not respond to this treatment and as the filling must be cleaned also, it is the general custom to first treat with dilute caustic soda at 160° F. for ½ hour and then follow with a soap bath just as if the fabric were pure silk. Next give a thorough hot, then cold, rinse, followed by an acetic-acid rinse and another cold rinse. The goods are now ready for dyeing.

After dyeing, it may take two runs on the frames to bring the fabric to width without damage, as all rayons except the acetate type are quite tender while wet and will not stand the strain that silk will. At this point the operation is generally concluded, and in most cases the fabric will feel hard rather than soft. If more body is desired, a run through a quetsch with a light finish may follow. If more softness is wanted, the quetsch is supplied with a light emulsion of soluble oil and mineral oil. Another framing follows. If calendering is insisted on, use little pressure and a fiber roll rather than steel; but in most cases a calendering is unnecessary. In any event it is always better to control the hand of the fabric by the degree of preliminary treatment in the dyehouse rather than in the finishing room.

◆

Dyeing Glove Silk

Technical Editor:

In the article on the subject of "Dyeing Glove Silk," which appeared in the May 12 issue of TEXTILE WORLD, *the addition of 12 quarts of boil-off liquor to the dyebath was recommended. This is a smaller amount than we have been employing, and we are wondering whether it would produce satisfactory results. (7228)*

The formula recommended by the author called for twelve 12-quart pails of boil-off liquor. Owing to an unfortunate typographical error, this appeared in the article as 12 quarts—a quantity which is probably insufficient to produce the best results. We thank you for calling our attention to this error.

◆

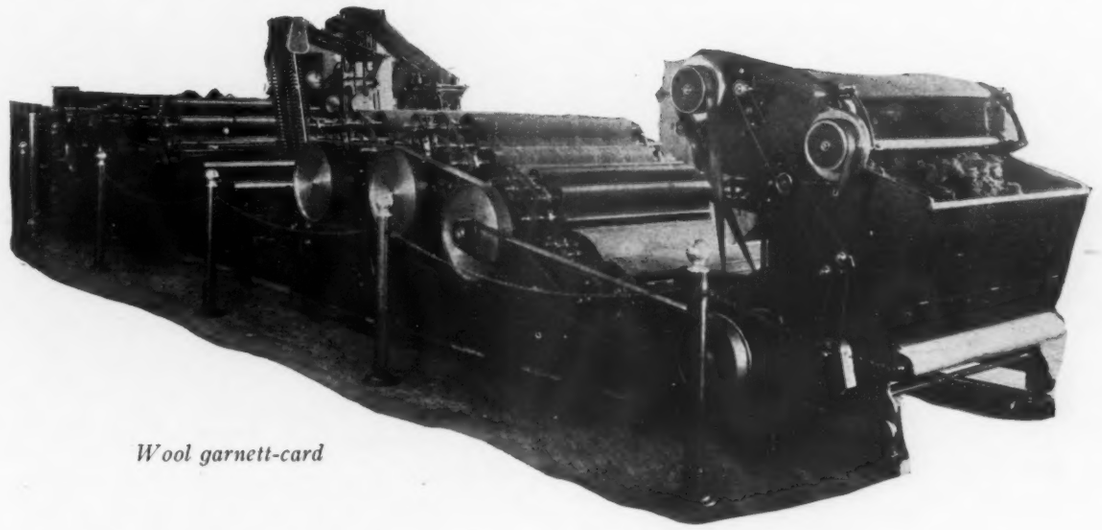
Defects in Knitted Tubular Rayon

Technical Eidtor:

We are enclosing a sample of knitted tubular rayon material. Upon examination you will find that it has several small holes. So far this condition has shown up only in white, and it is our dyer's opinion that this trouble is due to faulty yarn. We are inclined to disagree, for all other colors except white seem to come through properly. We shall appreciate your opinion as to the cause of the defects. (7196)

A close study of this sample shows nothing to indicate that there is any mechanical trouble causing these holes. We have seen similar defects which have resulted from incomplete washing after bleaching. The reaction of some bleaching agent left in the fabric weakens the yarn, and holes result. There are so few holes in this piece that there is little chance to definitely establish this. Have your chemist test the defective pieces for the presence of oxycellulose.

New Machinery & Processes



Wool garnett-card

Wool Garnett-Card

ELIMINATION of a separate garnetting operation is made possible by means of a wool garnett-card recently developed by Proctor & Schwartz, Inc., Philadelphia. The machine is particularly adapted for hard ends of various types and will produce high-grade roping entirely from waste. With certain changes in the clothing, however, regular wools can be handled.

Running a stock mixture of 75% worsted serge rags and 25% hard-twisted worsted thread waste, this machine has attained a production rate of 100 lb. per hour on ¾-run roping, and 75 lb. per hour on 1-run roping spun to 1½-run yarn. The stock used was put through without previous preparation other than oiling and tearing apart of the worsted serge and threads in a shoddy picker. Mixed stock, about two-thirds of which was ¼-blood and coarser, and the remainder ½-blood, was employed. Since hard ends are shortened only once, the staple is to a large degree protected from injury and a high quality of roping and spun yarn is obtained. There is also less stripping with garnett wire.

The breaker and finisher units—with the exception of the finisher doffer, which is covered with felt-face card clothing—are equipped throughout with garnett wire. Due to the fact that some of this garnett wire is so fine as to have the same number of points per inch as has card clothing, the material is delivered in a thoroughly carded condition. The intermediate feed is of the broad-band type, especially designed for careful carrying and laying of the stock. The tape condenser has been redesigned with deep-grooved dividing rolls and wide tandem rub aprons in each bank; this feature increases the rub and consequently the production. The number of ends taken off may be varied from 40 or less for coarse yarn to 144 or more for fine yarns.

The breaker unit is a standard Proctor & Schwartz garnett machine of sectional-frame construction; it has two main sections with 30-in cylinders and 8-in. workers, one 20-in. preliminary section with 6-in. workers, 16-in. breast and lickerin. The finisher unit is a two-cylinder machine, with 30-in. main cylinders and 8-in. workers. The machine is designed to maintain the proper speed relationship between the various rolls and thus secure improved carding action and, at the same time, permit the use of smaller cylinders than are usually employed.

All cylinders are wound with garnett wire calked in grooves, except the three 30-thread workers on the last section; to give more points per inch than regular garnett wire, the wiring on the last machine is of especially fine punching. The breast wire is specially heat treated to resist hard usage.

On the breaker feed a trap door below the scale, which closes when the scale is tripped, prevents extra stock from falling into the scale and thus insures accurate weighing. Special eccentric, straight-line combing motions in the hopper and over the scale are suited to long stock or heavy wastes. The clutch is of the cam and roller type. The intermediate feed, which is equipped with a side draw on the breaker and full apron support at all points, is designed to handle weak or poor stock as well as better grades. A strong and accurate traversing motion assures an even feed to the finisher unit. The garnett-card is driven by 10-hp. motors on breaker and finisher connected to the main cylinders by multiple V-belts. Test shows that the actual power required is 7.5 hp. for the breaker unit and 9.8 hp. for the finisher unit. The unit is 47x10 ft.

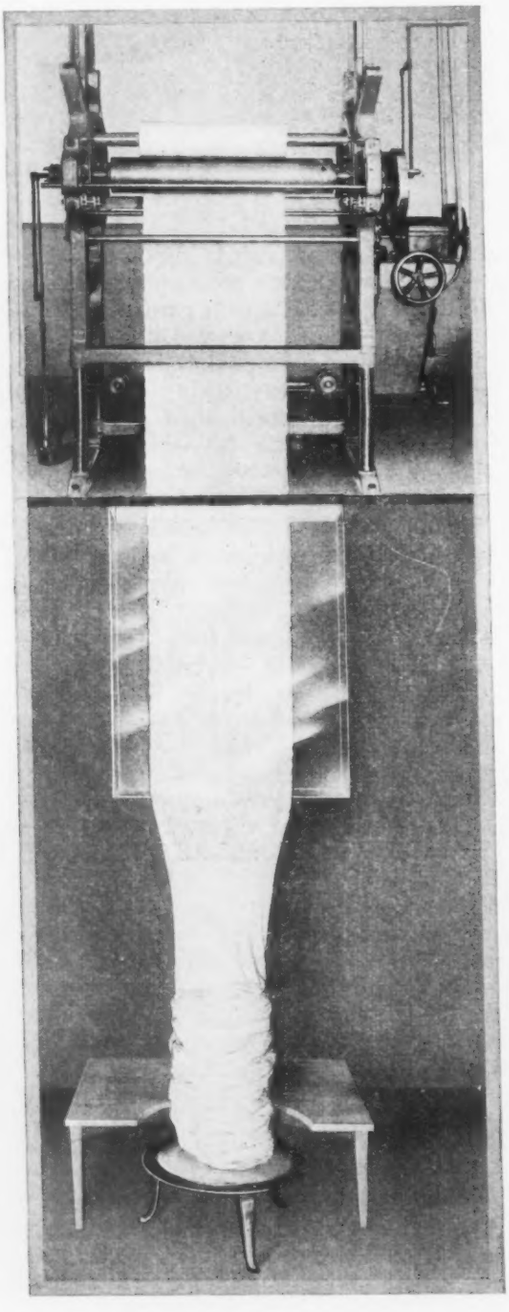
In addition to saving garnetting costs when running hard ends, the machine is said to enable unusually high production. Other advantages claimed are savings in initial cost, floor space, power, labor, and other operating expenses. The manufacturers believe that modifications in the set-up of the machine will enable production of a wide range of yarns from various types of stock.

Finishing Machine for Tubular Knit Goods

DRYING, tentering, and calendering of tubular knit fabrics in one operation is made possible by means of the Perfectos finishing machine recently added to its line of textile machinery by H. W. Butterworth & Sons Co., Philadelphia. This machine, which was developed by the Perfectos Machine Co., Leicester, England, is

suitable for processing knit goods of silk, rayon, cotton, wool, and combination fabrics.

The Perfectos machine consists of a hollow metal cylinder or cartridge on which several hundred yards of goods are placed. At the bottom of this cylinder is a wide flange. This fits over an opening in the machine, which has a centrifugal blower at one end. By means of this blower air is forced across steam pipes and up through the cylinder. At the top of the cylinder is an apparatus somewhat similar to a vertical tenter frame, having about 25 small anti-friction wheels on each side. The goods are constantly pulled up over these. Both ends of this frame are open and are curved toward one another. The goods are drawn up on this frame. Here they are stretched, and at the same time are dried by the constant blast of warm air, which also flutters and agitates the goods and increases the hand. When the fabric reaches the top of the tenter frame it is fed between heated calender rolls, and then is rolled up.



Finishing machine for tubular knit goods

It is claimed that the new machine will dry, tenter, and finish all classes of fabric, whether circular or warp knitted, and produce an entirely different finish from that given by any other machine on the market. In the case of rayon it is said to provide, without marks or glazing, the finish and sheen characteristic of real silk. On cotton or wool, a soft finish can be obtained; and means are provided for producing either a bright or dull finish. It is further stated that, since drying, tentering, and calendering are accomplished in one operation, use of this machine enables a reduction in finishing costs. Another feature is that all material can be examined during the finishing process. As the machine is of the vertical type, it requires little floor space; it is usually installed on two floors, the calender being placed on the floor above the drying and tentering equipment.

Nasmith-Type Comber

SEVERAL improvements have been embodied in the Model E Nasmith-type comber manufactured by Whitin Machine Works, Whitinsville, Mass. Among the most important of these innovations are the Barker flexible top comb and an auxiliary nipper knife.

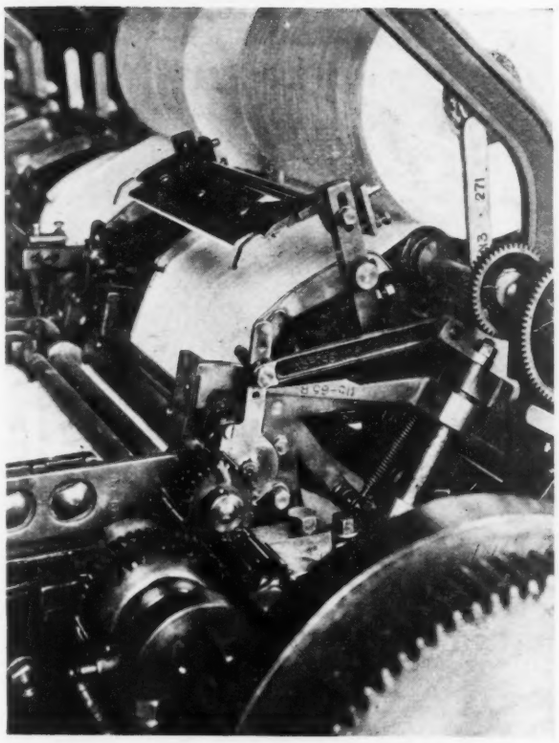
With the flexible top comb it is possible to place the top-comb needles in any position in the tuft of cotton projecting from the nipper after it has been combed by the cylinder needles. Since this can be done regardless of the position of the nipper in relation to the detaching rolls, improved combing is facilitated. Displacement of either the leather detaching roll or the top-comb blade, from a lap-up on the back leather detaching roll, is also prevented by the flexible top comb.

The auxiliary nipper knife, which hangs on the front of the top nipper knife and is free to move up and down, is maintained at a fixed position in relation to the needles irrespective of the weight of lap used. No matter what weight of lap is being fed to the comber, the auxiliary knife always holds the cotton down to the needles, affording cleaner combing and permitting by the use of a heavier lap a production of 20 lb. per hour at a speed of 85 nips per minute. This comber is provided with five drafting rolls to take care of the increase in production. In designing the comber careful attention has been paid to insure simplicity and rigidity of construction.

Woolen Ring Spinning Frame

AN IMPROVED woolen ring spinning frame incorporating a number of new features has been placed on the market recently by Davis & Furber Machine Co., North Andover, Mass. The machine is equipped with a stationary ring rail and movable spindle rail designed to maintain a fixed distance between the rolls and the traveler. Change of twist from left to right is made by changing one conveniently arranged sprocket; the spindle-tape drive is designed to run equally well in either direction, to eliminate slack twists, and to require no additional attention when changing the twist. Wide range of turns per inch is obtained with about one-half the number of twist change gears employed on older models.

As the tube change gear and twist change gear are separate, twister-tube speed may be changed without



Nasmith-type comber with flexible top comb

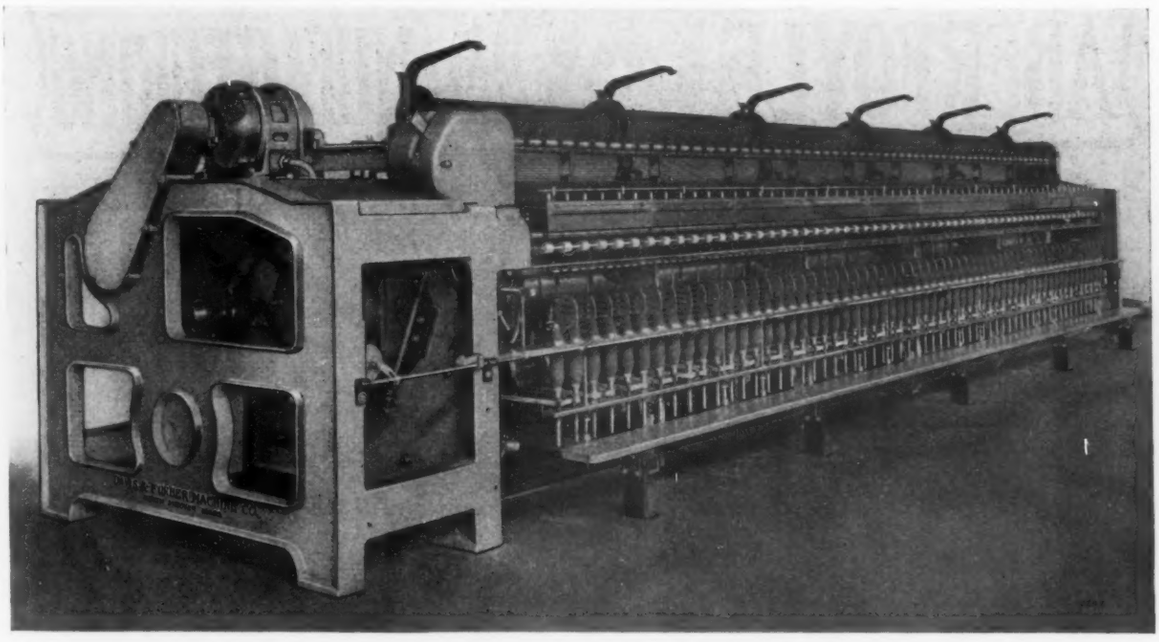
affecting the twist speed. Speeds on both sides of the machine are varied by changing the draft change gear on one side of the machine only. A small variation in draft is made by a one-tooth change in the draft gear. This is true also of the front-roll change gear. Connecting cross-shafts for both rolls are driven by bevel gears running in a bath of oil in lint-tight housings. The spindles are driven by endless tapes, one tape driving four spindles (two on each side). The tape passes over two tin cylinders, which run the complete length of the frame, and around a weighted idler pulley, thus assuring an even tension on all spindles regardless of their height and position. Roving-drum speed is controlled by a gear that can be changed readily without use of a wrench.

To eliminate the oily traverse space and consequent liability of oil stains at the roll stands, a novel traverse motion in which the tubes are driven traversed has been adopted. This motion also lays a long section of scavenger yarn on the scavenger roll instead of a bunch. The mechanism is of rugged design to enable it to carry the tube casings and back-roving thread guides. All worms and worm gears run in oil. Cork-covered draft press rolls, which can be taken out for roll up and replaced without stopping the frame, have been installed. The builder motion has a wide range of adjustment; and the chase on the bobbin can be changed easily from $1\frac{5}{8}$ to $2\frac{1}{2}$ in.

When the set is full the operator trips a catch, and the spindle rail with all full bobbins is automatically lifted by power into the high position ready to be doffed; then by pulling a small rod near the doffing catch the operator can raise the pig-tail thread guides on both sides of the frame; the sections of separators or balloon guards are swung back; and the frame is ready to be doffed—the whole operation being performed by a girl, without laborious work.

The frame is motor driven by means of chain drive. Part of the main frame is utilized for housing the chain, which runs in a bath of oil fitted with a dustproof cover. A shipper-operated master switch controls the frame and allows the operator to stop or start the machine at will throughout its entire length.

An ingenious arrangement has been provided for cleaning the press rolls, which are located in back of the steel rolls, when ends break and roll-ups occur. The operator simply holds her hand with palm uppermost and pushes back a lever below the roll, which causes the roll to drop into her hand.



Ring spinning frame

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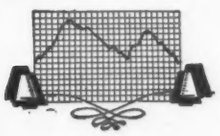


Further Business Recession Is Indicated

Textiles, However, Are Expected to Touch Bottom In August, Then Improve, Says Dr. Haney

SUMMARY

No signs of early improvement in general business are apparent, and further recession is indicated. It is an open question whether the long upward trend of recent years will be resumed. Although textile mill earnings and stocks continue depressed, hopes of improvement this fall are warranted.

•

The analysis and forecast by Dr. Lewis H. Haney, Director, New York University, Business Research Bureau, which regularly appears on this page, considers various branches of the textile industry from week to week. The conclusions reached in the Analyst are mostly forecasts and generally apply to a time two or three months ahead. The Analyst is based on statistical data and does not reflect temporary trade sentiment.

HAS the long-term trend of business changed? Is it likely that in the future the upward trend may be more gradual than in the last decade? May there even be a period of declining trend in the general level of prices and business volume in the United States?

Will Former Uptrend Be Resumed?

These are questions which cannot be answered positively, but which are none the less important. At least, it may be said that the only basis for denying the *possibility* of an affirmative answer to them lies in such meaningless phrases as "I am a bull on the United States," "I have every confidence in the future of our country," and "the ingenuity and resources of the American people," etc.

The first chart may throw some light on the possibility of a less rapid upward trend during the next few years. It will be noted that the first stage in the current business recession has been extraordinarily sharp and drastic. The secondary "rally" in business early in the year has halted far below the old line of normal growth (which was not true in the recessions of 1923 and 1926). This indicates that supplies of commodities are still in excess of the ability of commodity markets to absorb them at current prices. The prolonged recession in commodity prices since early 1928 also appears significant, and that decline has not yet been checked.

At least a plausible hypothesis might be stated to the effect that a line drawn from the first "shoulder" in the rising curve of industrial production (early 1928) through the peak of the first "shoulder" in the curve of recession (February, 1930) may indicate the trend, and that this trend is not upward.

This is something for the long-range student of business to think about. Unless something can be done to give a new stimulus, our business expansion may not continue at the former rate. Something, however, may be done in one or more of the following ways: (1) a readjustment in wages; (2) introduction of improved machinery and methods; (3) stimulation of domestic demand by lower retail prices, and (4) stimulation of foreign demand in various ways. These are the chief possibilities upon which we must base our hopes for a resumption of the former upward trend.

In any case, it should be noted that such industries as textiles, which have been in a downward trend for some time, may do relatively well even if the general trend of business is not so favorable.

Chief Current Business Factors

As to the immediate situation in business, we find the following facts most significant:

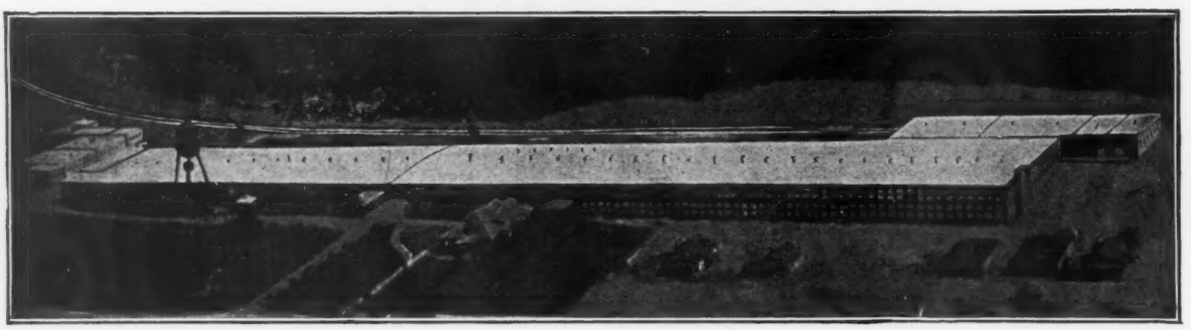
1. The trend of commodity prices is still downward, including most basic materials.
2. The trend of employment is still downward, and consumer purchasing power is somewhat reduced.
3. Stocks of many commodities are still large and have continued to increase, though less rapidly.
4. Production is not sufficiently curtailed in a good many instances.
5. Bank credit is now a frozen condition to a considerable extent, the banks being too deeply involved in investments and loans connected with securities and real estate.
6. There is renewed liquidation in the stock market, and a congested bond market.

The one really favorable development of a broad sort is the fact that the long decline in building activity has apparently been checked.

Building Recession Checked

Last month's building permits, allowing for seasonal conditions, increased a little. Preliminary figures, covering 202 cities, show an "index number" of 57, based on the average of 1921-1927. This means that plans for residences, stores and office buildings in cities were 57% of the monthly average during 1921-1927. But, in April, they were only 56%, and in March, 50%.

The trend has been downward from April, 1929. Permits are still at the



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lowest level since the middle of 1921. But at least the decline has been halted. The bottom may have been touched.

Construction Decline Halted

A similar situation is found in construction contracts awarded. These declined slightly last month, but since January the trend has been about sidewise. Ever since October, 1928, the contracts awarded have been in a downward trend. Surely it is encouraging to come to a flat spot.

The index of contracts, taking 1921-1927 as 100, is now 72.6. This compares with 74.6 in April, and 69 in January.

Moreover, we can say that there is another sign which may be indicating the end of the building slump. This is an apparent increase in issues of long-term real estate bonds. Such issues usually forecast building activity. As they picked up in March and April, they tend to confirm the opinion that the building outlook is not so bad as it has been. Like a tired swimmer, we may feel reassured as long as we can touch bottom in this basic industry.

Textile Industries Near Bottom

It may also be said again that the textile industries, as a group, seem close to the bottom. It is not unlikely that the low point will be reached sometime before the end of August and that a more-than-seasonal increase will be evident by fall. As shown in the second chart, department-store sales are relatively high compared with wholesale dry-goods sales, and both are above their average relationship to the estimated *value* of the current output of textiles.

The period of the usual two-year textile cycle has been nearly completed. The textile industries are facing facts, and are cutting the garment to fit the cloth. In these industries, too, great strides have been made in the introduction of new equipment, as well as new economic concepts. The hope seems warranted that better times for these industries will come before the end of 1930.

Textile Mill Earnings and Stocks

Cotton mill stocks continue to move sidewise or downward. Southern mill stocks have made new lows, while New Bedford stocks hold at the same low level. Manufacturers' profit margins have declined further, and, with the present low volume, no improvement is yet in sight.

Wool-mill stocks have reacted with the rest of the market. The manufacturers' "replacement margins" have declined a little, and volume of business continues low. While a turn for the better seems probable before the end of the year, and wool mill stocks may have seen their lowest levels, no sustained advance is yet indicated.

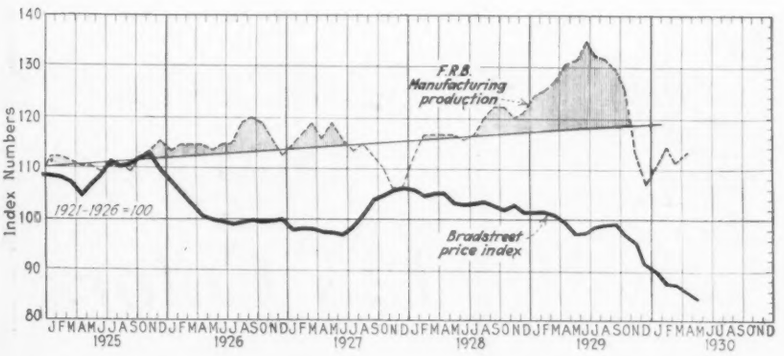
140
130
120
110
100
90
80
Index Numbers
F.R.B. Manufacturing production
1921-1926=100
Bradstreet price index
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1925
1926
1927
1928
1929
1930

Fig. 1—PRODUCTION AND PRICES—Industrial Production—Average Daily, Adjusted for Seasonal Variation, Federal Reserve Board; Commodity Price Index—End of Month, Bradstreet's Journal. Average 1921-1926 = 100 for both indexes.

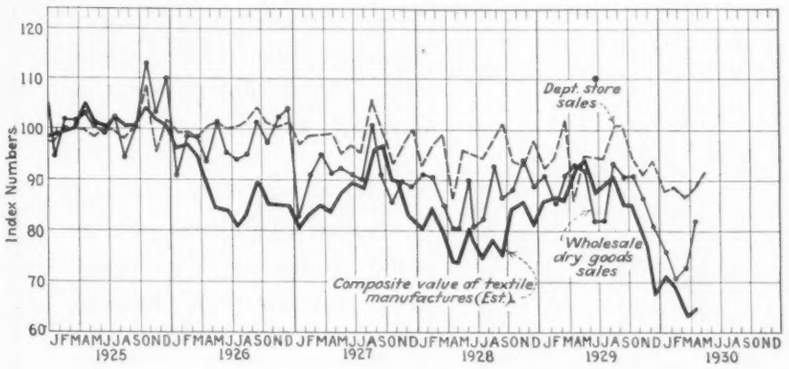
120
110
100
90
80
70
60
Index Numbers
Dept. store sales
Wholesale dry goods sales
Composite value of textile manufactures (Est.)
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1925
1926
1927
1928
1929
1930

Fig. 2—GENERAL TEXTILE BAROMETER—Wholesale Dry Goods Sales—Adjusted for seasonal variation; 1922-1926 Average = 100; (Federal Reserve Board) Dep't Store Sales—Adjusted for seasonal variation and trend; (Federal Reserve Board) Composite Value of Textile Manufactures (Estimated)—Weighted Composite of Cotton, Wool, and Silk Machinery Activity adjusted for Seasonal Variation and price levels (N. Y. University, Bureau of Business Research).

◆

The Textile Trend

Cotton Textile Markets: A considerable degree of unsettlement was apparent in the cotton goods market immediately following declines in financial and commodity markets early in the current week. Extremely low quotations were heard on numerous constructions, but sellers were inclined to doubt that goods were actually moving at those figures. At best, prices were nominal, with a wide spread between bids and offers, neither of which were plentiful. Weakness of cotton, especially July, has been most disheartening. Further curtailment in New England mills, especially in fine goods group, was noted.

Wool Textile Markets

Wool goods sellers were relieved that the tariff had been disposed of, and to an extent credited the stability of wool to this factor. Securities and commodities of all types were undergoing severe drops while wools seemed firm at present levels. Duplicating for certain popular priced sellers was satisfactory last week. Few were in a position to make such a statement, but these few seemed to be getting all the business available. Stronger tone in worsted yarns and buyers are less cautious in new commitments.

Knit Goods Markets

Outerwear continued strongest division of knit goods markets. Reorders for bathing-suits kept sales agents busy this week, and the trade was hopeful that demand would last well into July; bathing-suit industry has had an excellent season. Knitted polo shirts and beret caps were active. Lightweight cotton and rayon underwear improved; small but frequent ordering was the rule. Balbriggans quiet but steady; heavyweights are spotty, all the trade, with the exception of some large mills, being badly undersold. Demand for half-hose and full-fashioned improved slightly; men's goods, made to retail at 25c. and

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125 Colors

Amaray and Amafleece are different in themselves. No other yarns are like them. Add to this the fact that they are available in 125 solid and combination colors—fast to light and washing.

These yarns are available in 8s to 30s, single and ply, on cones, tubes and in skeins. Ideal for hosiery, bathing suits, sweaters and jersey cloth.

Consider the possibilities in *your* goods of a lofty, wooly-feeling yarn in these new, bright color combinations.

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Sales Agents
EWING-THOMAS CORP.
Mercerized Yarns and Thrown Silk
AMERICAN ENKA RAYON
IMPORTED DUTCH ENKA RAYON
for the Southern States

CANNON YARNS

35c. were moving. Retailers in New York and on the coast reported good call for dull-luster hosiery, but much of the retail trade is dissatisfied with the response from consumers.

Silk Textile Markets

Raw silk weakened further, prices varying so greatly as to be nominal. Market tone depressed, and no early improvement seen. Trading was largely speculative. Thrown silk was uneven, but showed resistance to downward pressure of raw silk; hosiery trams were in demand. Spun silk quiet, which was ascribed to summer lull; fall inquiries encourage trade to look for active August. Broadsilk mills have cleared summer chiffons and are concentrating on cantons, metals, and velvets for fall. Moderate future business placed, and manufacturers noted increased confidence among cutters and retailers. Shantungs continued strong.

Textile Shares Move Downward

With Few Exceptions Sag Toward the Lows of the Year

Boston.

THE textile share market during the week continued its downward sag, assisted in that direction by a severe break on the big exchange. American Woolen preferred touched 29⅝ as compared with a year's high of 44⅞ while the common was barely steady around 11¼. Amoskeag at 12 was at the low of the year as compared with a high of 18⅜. Pacific Mills on a few sales made 21½, the low of the year being 20 and the high 30. Interest was at a low ebb at the weekly stock auctions, 74 shares only being sold. Arlington receded to 22 as compared with the low of the year of around 20. Investors in the New Bedford and Fall River districts continue to mark time awaiting definite news of the pending fine goods merger.

Interest in the Bancamerica-Blair merger of fine goods mills continues paramount but the announcement of the withdrawal of the Grosvenor-Dale interests draws attention to the tentative basis on which the proposition rests. Some are asking whether the bank has developed a case of "cold feet." Some are disposed to believe the delay incident to an audit of the books of each mill corporation is more than welcome to the bankers in view of the present unfavorable conditions in financial circles. There have been hints that the audit will not be finally completed for a number of weeks and perhaps not before the latter part of the summer. No one really expects the auditors will find the books revealing any different condition than has been represented, but those long experienced in business know that such a canvass is bound to turn up plenty of things that could be used as excuse for tipping over the whole proceeding if the bankers or the promoters really want such an excuse. Check-up of mills in Fall River and New Bedford named in the proposed merger indicates continued interest in the proposition despite the withdrawal of the Grosvenor-Dale Co.

General Rayon Earns 46c.

The consolidated income account of the General Rayon Co., Ltd., and subsidiaries, shows net income of $994,916 available for interest charges, which is equal to 3.18 times bond interest, for the year ended Dec. 31, 1929. After deducting all charges and dividend requirements on the 7% preferred stock outstanding, there remained $229,321, equivalent to 46c. a share on the common stock now outstanding. For the first quarter of the current year, the company was reported to be operating at the same rate as in the latter part of last year, which was the most satisfactory period of operations for the company.

Fairhaven Properties Bring $190,000

The five large buildings and several smaller units of the Fairhaven Mills, New Bedford, Mass., were sold recently at auction in a lump for $190,000, the purchaser being Fred W. Green, Newport, Mass., father of the auctioneer, Fred W. Green, Jr., of New Bedford. Bidding was slow and scattered, very few of those present participating. The auctioneer said that his father had bought the property for the creditors and added that a concern had its eye on the property, intending to start a new industrial project there. Fairhaven's indebtedness to bank creditors amounts to $214,000, and it is understood that if any subsequent sale of the property should yield more than the amount due the banks, the balance would go to preferred stockholders. The auctioneer said that by agreement with the board of assessors the 1930 taxes on the property which the purchaser was subject to pay, had been reduced to about one-third the original figure.

York Transfer Progressing

Transfer of the stock of the York Mfg. Co., Saco, Me., to the New England Industries Inc., on the basis of an exchange of shares is expected to be completed by June 26, it was announced at a meeting of stockholders of York recently. Frank L. Palmer, a director, and chairman of the special committee appointed to determine the future of the mill, stated that at present over 70% of the stock of York had been deposited with the Old Colony Trust Co., Boston, and the Fidelity Trust Co., Portland, Me., for the exchange. He assured the stockholders that the New England Industries intended to keep the mill in operation. He said that the company believes that with the addition of from 800 to 1,000 wide looms in the weaving department the mill can meet its competitors favorably. From $500,000 to $1,000,000 would be needed to purchase looms, re-arrange the department and provide working capital.

A special meeting of stockholders of the Farr Alpaca Co., Holyoke, Mass., will be held June 25 to vote on authorizing the retirement of 4.000 shares of stock of the company now held in the treasury. This will have the effect of reducing the number of shares from 144,000 to 140,000.

Everett Mills have declared a third liquidating dividend of $4 per share, payable June 23 to stock of record June 18.

Boston Stock Auctions

The following sales of textile shares were sold at Wednesday's auctions:

Shrs	Mill	Par	Price	Change
13	Berkshire, pfd.	100	70	— ¼
6	Naumkeag	100	88	.....
10	New Hampshire Spinning	100	15	—20½
35	Merrimack, com.	100	50½	.....
10	Arlington	100	22	— 1¼
74	Total			

A Quiet Week in South

Charlotte, N. C.—The average bid price of 25 common stocks of southern cotton mills showed practically no change for the week ended June 14. A decline of only 4c. a share was recorded from the previous week's close. The weekly summary as furnished by R. S. Dickson & Co. gives the close at 75.00 as compared with 75.04 for the previous week. Trading was quiet and only minor changes were made in the price of the more active common and preferred shares.

Canadian Cottons Statement

Montreal, Que.—Canadian Cottons, Ltd., Victoria Square, Montreal, which has just presented its annual statement for the year ended March 31, reports that owing to intense competition from Europe where the labor market is more favorable, it has had to invoice many lines at, or below, cost. Operating profits for the year amounted to $75,574, as compared with $255,946 in the preceding year. Following the payment of interest on investments, bond interest and provision for bad debts, the sum of $57,714, was due to pay on both classes of securities, against $240,910 in 1928. Current assets are shown at $6,316,488, and current liabilities at $1,428,443.

Ontario Silknit, Ltd., this city, in its financial statement for the year 1929 reveals a net profit of $211,417 for the fiscal year ended Dec. 31. The total

Highest Grade RAW *and* THROWN SILK

Especially for
HOSIERY MANUFACTURERS

OUR own direct source of supply in Japan insures a uniform quality of the very best grade of silk obtainable.

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JAPAN OFFICE
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assets of the company now amount to $2,426,321. Current liabilities are shown at $515,602.

JANTZEN SALES INCREASE

Jantzen Knitting Mills, Portland, Oregon, reports shipments for the nine months ending May 31, 1930 of $4,086,000, an increase of $937,000 or 30.2% over shipments of $3,099,000 reported for the nine months ending May 31, 1929. Sales for the whole fiscal year ended August 31, 1929, totaled $4,254,000, which amount is only $218,000 in excess of shipments for the nine-month period ended May 31 of this year. The remaining months of this fiscal year, June, July and August, will therefore largely represent the business gain of the Jantzen Knitting Mills for the current operating year. Officials anticipate that sales for this year will show an increase of more than 25% over the 1929 figures.

Weaker Burlap Market

No trades were recorded on the burlap futures exchange at mid-week due to unwillingness of buyers or sellers to make concessions. There was a weaker tone on reports of easiness in the actual market.

Burlaps declined about $2 a bale on the outside market with little actual business transacted. Spot and afloat prices eased 10 points, with further shading possible on bids.

The 8 oz. 40s for spot, afloat, and June shipment were 5.05c. The 10½ oz. 40s for spot and afloat were 6.50c.; June shipments, 6.50-6.52½c.

Boston Wool Receipts

Receipts of domestic and foreign wools at Boston, also imports at Philadelphia and New York for the week ended June 14, based upon data compiled by the Market News Service of Bureau of Agricultural Economics, Department of Agriculture, are as follows:

Domestic	13,100,000	65,895,000	49,600,000
Foreign	601,000	41,070,000	67,200,000
Total	13,701,000	106,965,000	116,800,000
IMPORTS AT PRINCIPAL PORTS			
Boston	601,000	41,079,000	67,200,000
Philadelphia	848,000	28,570,000	40,587,000
New York	600,000	26,073,000	40,096,000
Total	2,049,000	95,722,000	157,883,000

Durene Sport Hose in Active Call

Commenting upon the growing interest in durene merchandise, C. E. Beatty, sales councillor of J. W. Landenberger & Co., Philadelphia manufacturers of hosiery, this week stated that his firm is experiencing an excellent reception in the United States and Canada with low luster, fine count durene sport hose, seven eighths and full length.

Further Decline in Cotton Yarns

Spinners' Need for Immediate Orders Felt

PHILADELPHIA

YARNS this week have been forced to weather storms from two sides. On Monday cotton dropped to new low levels, 1-cent decline being seen that day, and, in addition, yarns were forced to meet general lack of interest from buyers. The bright feature of the whole situation has been the manner in which deliveries on old contracts have continued, knitters taking delivery as specified through this unfavorable period.

Prices of both cotton and yarns have reached levels that were thought impossible a month ago, and it is natural that both buyers and sellers have become pessimistic concerning the future. Many predict that further decline in both will be seen during the balance of the month, and look for crop scares, which usually come in July to strengthen the situation at that time.

At present quotations are nominal, one spinner being willing to sell a limited amount, upon which he expects to run for two weeks, at figures his competitor, who may not need immediate orders, would consider impossible. Often there is a difference of 3c. between spinners.

CARDED YARNS A CENT LOWER

Early this week the price level was at least a cent lower than a week previous, and in consequence sellers were becoming more willing to make concessions while buyers were becoming more cautious in making new commitments. Yarns have been no different from other commodities, with many sellers but few buyers. The action of prices is witness to this. For the first time, competition in combed yarns has forced prices down faster than cotton, and sales this week have been made on a price basis that is out of line with the raw material.

Mercerizers have a fair volume of business on their books, but specifications on these contracts have not been coming in. This has resulted this week in price-cutting by this group to lower levels, in their endeavor to book sufficient business to keep their plants running at least part time. It is possible for buyers who are willing to take delivery of a fair-sized quantity to drive bargains with processors at present.

DECLINE HAS BEEN ORDERLY

Yet the decline has been orderly and sellers have been willing to quote prices at all times which give the market level. Little strength is expected in view of the fact spinners are frank in stating that they need business, contracts on their books having been, or are about to be, completed. To book sufficient orders to permit them to see their way for two weeks ahead, the majority are willing to reach for business. This presents opportunities to buyers that are not lost when yarn is really needed.

Underwear manufacturers who have business placed with spinners to run several weeks ahead, are taking shipments on these in a manner that has been surprising, so that the drastic decline in values is having little effect upon this business. Weavers have few contracts running at present, and when they need yarn take small lots from dealers' stocks.

COMBED WITHSTANDS PRESSURE

Combed qualities have best withstood the drop, carded being as weak as or weaker than cotton, and processed yarns declining this week because of the passing of keener competition for small business. Combed yarns nominally are keeping in line with cotton changes, although there are smaller spinners in this group who are not holding this level firmly. Single combed counts are a cent under last week's level, priced on basis of 36c. for 18s.

●

WASHINGTON, D. C.—Business in carded cotton yarns was slow in the Argentine market during the week ended June 14 and prices were slightly lower, but the prospects were considered satisfactory. Demand for mercerized cotton yarns continued good, according to a cablegram from Assistant Commercial Attache James G. Burke, Buenos Aires, to the Bureau of Foreign and Domestic Commerce.

●

NEW YORK.—Cotton yarns remain in the doldrums, with little indication of the future course of the market. Where there was a slightly improved tone two weeks ago, this has entirely disappeared since the slump in cotton.

Prices are softer, especially on many of the carded counts, but dealers state that there is hardly enough activity to afford a real test of the price structure. The few sales recently put through have been at lower figures, and in other instances lower offers have been termed too high by buyers.

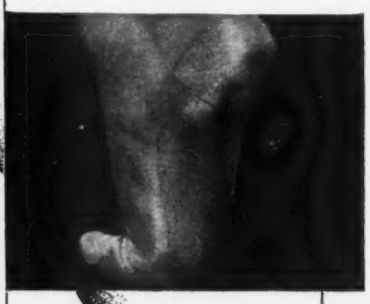
Yarn merchants state that it is very difficult to form any conclusions about the future. The news they receive from customers is not very promising. To all appearances, manufacturers have enough yarn on hand to fill current orders, notwithstanding the hand-to-mouth purchasing that they have practiced. The tariff has not entered into the picture

No seam to twist or mar the leg's sheer shapeliness.

FASHION steps forth in the newest smart stocking . . . no seam on the graceful leg or small trim ankle . . . no seam under the smooth snug foot or on the narrowed fitted "Gussetoe."

A stocking of exquisite sheer . . . shaped and fitted in the knitting . . . always elastic

The "Gussetoe" . . . narrowed and formed . . . the smooth foot . . . with no seam or ridge.



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a an important factor, except that all are glad to see this one element of uncertainty removed. A few think that this might pep up buying of certain combed descriptions, but do not anticipate action before three weeks or more.

●

BOSTON.—The yarn market continues slow and unsatisfactory, fully impressed however by conclusive evidence of sharp curtailment in cotton consumption and spinning activity during the month of May. Production is still running ahead of consumption both at the yarn and cloth ends of the industry. Sales of standard cotton cloths in May were only 66.9% of production while unfilled orders represented a decrease of 23.9% as compared with April. Consumption of cotton in May was 14% less than the average consumption of the preceding four months.

That spinners are anxious for business is evidenced by a willingness to accept orders at prices which would have been turned down a few weeks ago, when cotton was between 14 and 15c. Dealers are not experiencing any trouble in locating supplies at prices regarded cheap. Stocks of yarn in dealer and consumer hands are considered to be low. Consumers of yarn are buying only to cover on orders. A few spinners, however, appear well supplied with orders, enough to keep them going for two or three months.

The trade looks for further extensive curtailment among spinners during the next few months, during which time over-burdensome stocks will have been eliminated, cotton established on a stable basis and the textile industry generally moving on a firmer and more profitable merchandising basis. During the last week lower cotton prices increased the bearishness of buying and yet it may be said that some mills are in receipt of specifications arriving more rapidly and on a price level well above current average level for carded yarns.

Worsted Yarns More Active

Improved Demand From Knitting Trades

PHILADELPHIA.

YARNS are firmer, and, in several sections of the market, demand is better than has been seen for several months, English spun knitting yarns experiencing an especially active two-week period. Spinners of these yarns sold in one week almost as much yarn as they did last month and more than during April. Yarns for novelties are moving actively, beret counts being in larger demand than spinners can supply.

Although weaving counts in both English and French spun are more active, the feature of the market is improvement in knitting counts and the trade is talking of advances although they admit that it may be a month or more longer before spinners will take this step. Medium wools of bright types are stronger and spinners have little or no profit at $1.07½ basis for 2 20s, 50s.

Bathing-suit manufacturers are placing rush orders for use in duplicate goods orders, and spinners are rushing deliveries to reach manufacturers in time for 1930 merchandise. This rush will shortly end, and there already have been signs that the bathing-suit trade is beginning to think about placing yarn contracts for 1931 season, several spinners claiming to have booked business of this type.

FINER KNITTING COUNTS

While orders have been placed, majority of these manufacturers have yet to cover for their next season lines. One of the features of the yarn business with bathing-suit manufacturers has been the large demand for single counts made from Australian wool, producing a single yarn of the best quality going into a high grade garment. Indications are interest in yarns of this character will extend into the 1931 season.

Beret yarns are proving a boon to worsted spinners. Several are producing a quality spun from fine wool mixed with kid hair to give it a gloss required and they are being rushed for deliveries to such an extent they are unable to supply demand for the time being. It is a novelty, and the number of spinners able to supply the yarn is limited. Prices of kid mohair have advanced on strength of this interest.

Standard knitting counts are in much better demand and specifications on old contracts are better than reported at any time this year. Yet spinners do not look for the largest spurt in demand until later in the summer when majority of manufacturers begin to cover for their fall and winter season. Outlook for knitting yarns for the last half of year is brighter than for the last five and half months.

MEN'S WEAR DUPLICATE ORDERS

Specifications on men's wear mixture contracts are arriving in larger volume, these manufacturers being engaged in getting out duplicate orders promptly. The season is ending with a conservative upturn in volume, but not sufficient to bring the season up to the volume for the same season a year ago. One spinner reports the volume this year equal to last, but majority find it to have been considerably under.

A favorable aspect is larger interest in yarns by dress goods manufacturers, there being demand for fine counts and also interest from manufacturers producing a cloth containing woolen filling and having worsted warp.

In all three sections of the yarn market a better tone is apparent than for several months, and, with demand expanding at the same time that raw wool is causing firmer tone, the impression is given that in certain qualities advances in prices are not far distant. This has been talked about in English spun knitting counts, but to date these have been changed only by one or two spinners.

◆Hosiery Tram Demand Improves

THE apathy which has marked the hosiery tram market was broken by a ripple of buying this week; the call was split between spot and future business. It was inconsequential when divided up in the trade, but it encouraged throwsters somewhat.

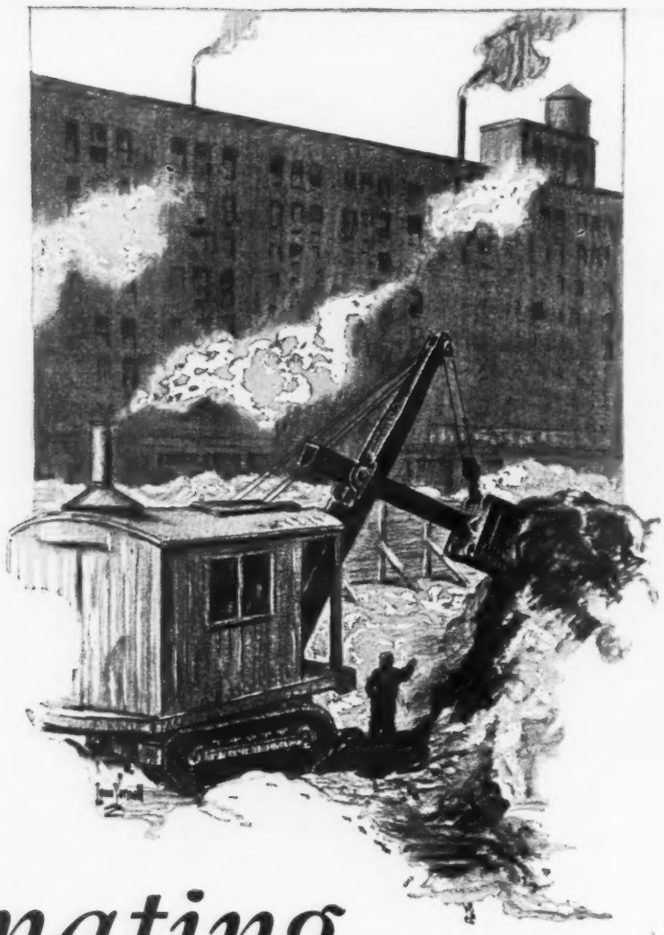
Knitters also were actively sampling grenadine twist yarns for experimentation in the production of dull luster hosiery. The grenadine yarn demand was uneven, some throwsters claiming good volume turnover, while others said it was light.

The tone of the market is depressed, due to the persistent weakness of raw silk. No real improvement is expected before August, though development of the dull-luster hosiery market may spur demand for grenadine twist yarn next month.

◆Spun Silk Feels Summer Lull

SPUN silk is now entering its normal mid-summer lull, and demand has registered a sharp decline. Spinners expect a quiet period lasting possibly six weeks. There are signs that fall buying may start earlier than usual; mills are receiving numerous inquiries and salesmen note a keen interest among manufacturers. There is a moderate demand for yarn for production of fall samples, but this is only "feeler" business so far. Spinners look for July to bring advance contracts for August-September shipment.

The market is firm and confident, thanks to an excellent spring season; sales for the first half appear to be well ahead of 1929, and the trade believes that the second half will be at least as good, comparatively speaking; the fall is never as good as spring in spun yarn buying, but the increased confidence in industry this year and the general feel-



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In the Wildman Full-Fashioned Hosiery Machine, the base is cast in four solid sections which are machined and bolted and pinned together to give a rigid structure. The result is a marked freedom from vibration in the operation of the machine.

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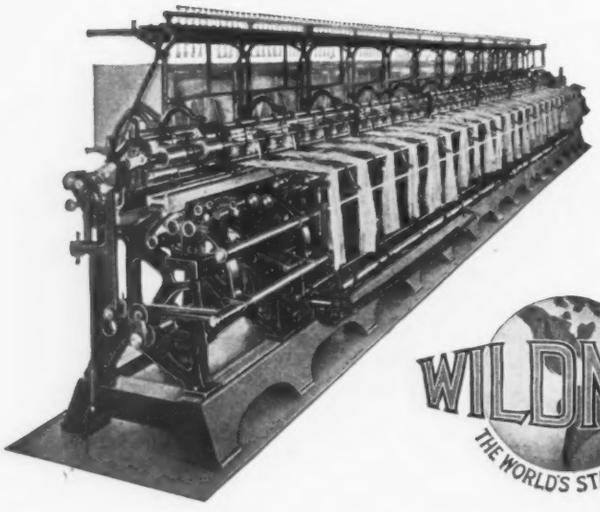

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THE WORLD'S STANDARD

WILDMAN MFG. CO.
Full-Fashioned Division
NORRISTOWN, PA.

WILDMAN
FULL-FASHIONED HOSIERY MACHINE

ing that the depression has ended, is expected to stimulate unusual producing activity which in turn will stimulate spun yarn demand.

Shantung is still a strong factor in broadsilks, and shantung yarns, though quieter than hitherto, are enjoying a moderate demand. There is a belief among both weavers and spinners that shantung may prove a popular fall fabric, which would mean a good fall turnover in yarns.

Rayon for Knitting Is Active

Yarn Market Steady But Demand is Slackening

RAYON yarn is steady, but buying at all ends is lighter. Underwear knitters are the only ones showing real interest; rayon underwear has moved fairly well in recent weeks, and mills are producing with more confidence. The result has been some steady ordering of yarn, both the 150s and the finer sizes. Other knitters also are in the market for rayon; some good-sized orders were received from the hosiery trade.

At the weaving end, things are slower. Cotton mills continue to consume large quantities of inferior at 80c., and the standard yarns have suffered accordingly. The total of yarn being sold at below market prices as inferior is so large that producers question whether all of this thread is true inferior. It is pointed out that the quantity of inferior normally produced is small, and the amount now changing hands is disproportionate to the actual output. However, the trade continues hopeful that this practice will soon wane.

Outwardly, all rayon prices still are firm, but there are frequent reports of special concessions. It seems likely that considerable rayon is being sold below market, as the demand is light and some firms are eager to effect quick turnover.

Protecting The Label

The decision of a leading producer of yarn to permit use of the firm's label only when the finished goods conforms to certain standard of quality, was a topic of much discussion in the trade. It is recognized as a constructive move, though numerous factors believe that the production of inferior merchandise, especially underwear, will continue despite such precautions. The best that can be hoped for from the new plan, is to cut down the quantity, of low-grade output by putting a premium on quality, these executives assert.

There are now several firms limiting the use of their label to knitters and weavers who follow quality standards in manufacture, and this restriction serves to protect the firm's brand name. Obviously, no producer will refuse to fill an order, and the manufacturer can make as much inferior merchandise as he wishes, without using the label. The trend, however, is to make the consumer label-conscious, and thus to strengthen the position of the firm which use the label to guarantee quality.

More About Mergers

The long-bruited rumors of an impending merger of several large rayon-producing companies, which recently have been denied and reaffirmed so frequently in trade as to apparently disqualify them, now seem to have at least a measure of justification. One active participant in the project announced that such a deal was pending, and another official refused to confirm or deny this statement. The deal is apparently still in the preliminary stages, and some time may elapse before the project is either accomplished or abandoned. In view of the important positions of the various companies a successful consummation of such a consolidation would be of the first significance to the industry.

◆Cotton Waste Trend Remains Uncertain

Boston.

THERE is no large buying of cotton wastes at reasonable prices at this time, the trade being involved in the general conditions which affect the cotton industry as a whole—caution in purchasing raw materials, the desire to keep stocks on a very low basis, and the certainty of further curtailment in manufacturing operations during the early summer.

The price trend for the week seems downward, but considerable resistance was offered by holders of good materials which resulted in the rejection of some of the low bids made on peeler comber and peeler strips. The wastes and by-products of Egyptian cotton were dull.

The market is disturbed over the lack of business and the difficulty of selling anything at a profit. There have, however, been two or three large sales of upland strips to New England mills, prices at which they were transferred are rumor only and not authentic. Some sales have been made recently on peeler strips at 11½c. and of comber slightly under 13c. Lower grades of comber can be bought at 12c. but little choice New Bedford comber can be bought by consumers at less than 13c.

The amount of strips produced in our domestic mills annually is enormous and the wonder of it is that it passes into consumption year by year, the end of any season finding little carry-over. Even at the present time the trouble with the Boston waste market is not so much lack of volume business as difficulty in obtaining a reasonable profit.

The general foreign trade in the Boston district is as inactive as the domestic trade. The local market dullness is not something confined to that particular vicinity, it is nation-wide, world-wide.

◆Stronger Undertone In Rayon Waste

INCREASED inquiries and greater confidence among manufacturers has brought a stronger undertone to the rayon waste market, though actual sales show little improvement. Orders are hard to get, and dealers do not look for any spectacular recovery of the market. The general feeling is that prices are at bottom and that business will begin a slow pick-up once the woolen mills start moving their fall piece goods.

The hesitant and hand-to-mouth buying which prevailed all spring has kept waste stocks at minimum and now the weavers have little or no stock on hand. The woolen trade looks for a turn for the better about mid-July which is expected to stimulate the movement of waste. At present, prices are nominal, stocks going for whatever is offered, the only exception to this being the few larger firms who are able to resist.

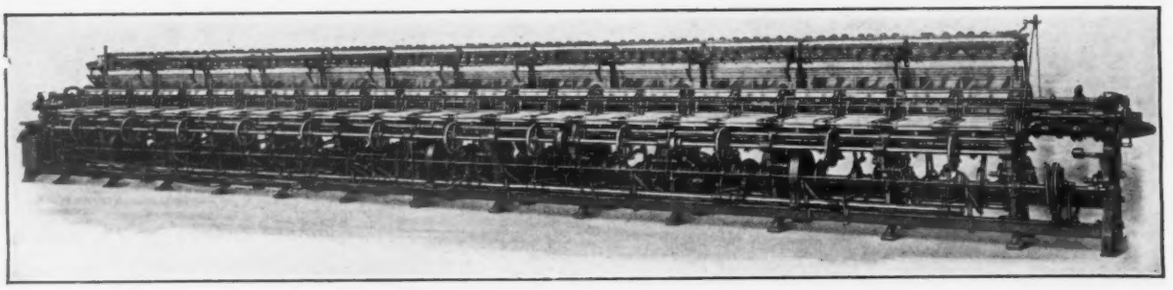
Rayon waste dealers also were encouraged by the enactment of the new tariff law, not so much for any benefit that may accrue from it directly, but more because it will end the general industrial uncertainty.

◆Noil Prospects Show Improvement

Boston.

PROSPECTS are brighter for noils. More inquiries are being received, covering not merely merinos but some of the medium and low noils. The general price level is about where it was at the first of the month, although exceptionally choice lots bring stiff prices. This general betterment will, however, have to go much further before any really good noil market is established.

Strength in short fine wools is a factor of importance and also increased interest in the types of wool coming from New Mexico to be scoured for use in woolen manufacture. Most dealers believe that the worst for the noil market is now over, that the low prices seen earlier in the year will prove to be the low prices of the entire year. Specialty noils are rather dull at the moment. There is some business being done on silk and rayon noils, also in alpaca and camelhair. Colored noils are still sluggish. The output of this type of waste



24 SECTION LEGGER

Your operators are easily trained on Reading machines and soon reach maximum production of firsts

For instance: A new mill started operation with our 24 section Reading machines less than 8 months ago. Today these machines are operated by newly-trained knitters in two shifts producing from fourteen to sixteen dozen pairs per machine per shift . . . an advantage of great importance.

TEXTILE MACHINE WORKS

READING, PA., U. S. A.

The "READING"
Full-Fashioned Knitting Machine

in the United States is restricted and imports are rare because colored noils as well as colored wastes are always relatively high priced in the foreign markets.

Foreign Noil Markets

In the Bradford market all good noils are scarce with prices definitely against the buyer. The position of holders is greatly strengthened by the restricted output owing to the strike, which has now been running almost 50 days. In the German market all good fine noils sell at full prices, the cloth, flannel and felt manufacturers purchasing freely. In the French market standard qualities of noils are in larger supply, but prices are unchanged, the recent advances being firmly held.

The top market is not very lively, although there has been some good buying of the finer grades at the low level of the year. Some of this buying was probably anticipating higher prices being asked in the near future. Some combers are asking $1.02 for a strictly fine top that will spin to 50s yarn, but the general quotation is 98c. to $1.00. Dry combed short fine tops are quoted 95 to 98c. and for half blood the quotations stand at 92 to 96. The Bradford market is less firm.

◆Substitute Market Awaits Betterment

Boston.

WOOL substitute business for year to date has been dull and profitless and at the moment there are no distinct signs for any immediate change for the better. Manufacturers nevertheless are all set for larger business.

Sluggish Rag Market

Mixed rags both softs and cloth are on a lower basis and this has tended to introduce further unsettlement in the graded rag market. Graders have been offering all kinds of rags at concessions and yet sales have been few and for small amounts. It seems evident that the old rag market is still in a poor way, and that nothing will lift it out of its troubles except increased mill interest in its offerings. There is some little demand for the cheaper worsteds for blends in the manufacture of automobile cloths, but the regular woolen mill demand for the better classes is conspicuous by its absence.

Worsted Wastes Firm

Worsted wastes are not coming out of the mills in any large volume nor are they moving with any freedom to consuming centers. The situation is quite steady but quite flat. The spinning wastes of fine merino quality are in strong hands and have recently moved up a few points. Dealers sense a better market for these commodities for the near future, and are ready to pay slightly better prices to the larger holders. Some garnetting is going on, though not to excess. Some mills prefer to do their own garnetting, thus avoiding any blending of lower grades in the manufactured product as offered. Good white single threads are scarce and bring strong prices. Medium threads are showing more movement which may be the precursor of better business in the near future. Lap wastes are firm and quiet. The best card wastes steady in price are tending to accumulate. In the foreign markets most descriptions of white and colored worsted wastes are firm. The Bradford position is helped by a restricted output.

Cotton Market Liquidating

Selling Promoted by Weakness In Stocks and Other Commodities

THE cotton futures market has remained under pressure of liquidation and scattered selling, promoted by failure of reports from the cloth markets to show any improvement. A feeling that the crop is showing the usual June improvement in spite of rather low temperatures and the general weakness of commodities has also contributed to the decline. Prices have made new low ground for the season on all positions; the new crop months have broken below the 13c. level, while July has lost the greater part of last month's premium.

The low level of prices appeared to be attracting a more widespread interest toward the end of the week, judging from inquiries heard regarding the lowest price levels touched during 1926-27, and there has probably been some scale-down buying of a semi-investment character. Trade demand, however, has been generally quiet, and, perhaps, is likely to remain so until there is an improvement in the goods markets or the new crop prospect has been more definitely established.

July Contracts Reduced

July contracts, which were selling more than 2c. a lb. above the new October at one time last month, were within 60 points of the new and 40 points of the old October contract on the decline of the past week. This reduction in the July premium does not necessarily mean that there has been any change in the July holdings of the cotton cooperatives or in the general attitude of either the Federal Reserve Board or the cooperative marketing associations. The long interest in July contracts was doubtless reduced during the period of May liquidation, but evidently remained very much in excess of the cooperative holdings.

Estimates as to the latter vary somewhat ranging from about 150,000 up to perhaps 200,000 bales, but the stock of certificated cotton as of June 16 at designated delivery points and Savannah amounted to 725,000 bales. Of this it is supposed that about 576,000 bales taken up on May contracts are held by the cooperatives and the difference between the total certificated stock and these holdings, amounting to about 150,000 bales, would seem very nearly sufficient to satisfy the supposed contract holdings in July.

So far as is indicated on the surface of the trading, no effort whatever has been made to support the price or to maintain the July premium at levels which would attract tenderable cotton from the ordinary channels of distribution. The position of the cooperatives appears to be that a certain amount of cotton remaining unsold at the end of the season will be turned over to the cotton stabilization corporation, and, as one might say, "bottled-up" for the duration of the current depression, at any rate. The effect that this will have on prices will depend upon the shaping up of new crop prospects as well as upon the development of trade.

New Crop Estimates

There have been complaints of low temperatures retarding growth, and toward the end of this week there was a feeling that warmer weather and sunshine are needed over the greater part of the South in the near future. On the whole, however, recent showers have been considered more beneficial than otherwise, although they may have favored the boll weevil in some eastern belt sections. The impression appears to be that the reduction in acreage is not likely to exceed 2%. This, with an average yield per acre, would mean a crop of about 14,400,000 bales, or about 1,000,000 bales more than some of the current estimates of this season's world's consumption. This, nevertheless, is something like 1,300,000 bales less than were consumed in 1926-27.

Figures on the world's end-season carry-over of American lint cotton are now running up to about 5,815,000 bales, compared with 4,480,000 last year. The increase in the world's visible supply is likely to be entirely in this country, as current statistics point to a substantial reduction in the combined mill imported stocks of American lint cotton abroad.

●

Boston.—The cotton market has lost ground during the week. Demand has been smaller and prices have moved lower without inciting any additional

LET THIS EXTRA REINFORCEMENT CLOSE THE SALE

DOUBLE extra splice at points of extra wear . . . The Banner Split foot NARROW EXTRA HIGH SPLICE and TRIPLE TOE attachment adds this extra merchandising feature to any "Split foot hose." And no loose ends nor ragged edge where silk instep joins reinforcement. Write for full information on this exclusive Banner feature. Price of attachment for machines now running gladly sent on request.

HEMPHILL COMPANY

Pawtucket, R. I.

93 WORTH STREET • • NEW YORK

PHILADELPHIA CHATTANOOGA HIGH POINT

consumer interest. Values softened under bearish consumption figures and favorable crop news which together brought about some liquidation of the July position. Both old and new crop months are closer together than a week ago. Quotations as of June 13 were the lowest of the season to that date.

Heavy curtailment plans are under way and further contemplated in the New Bedford and Fall River districts. The extra staple market closely connected with New Bedford demand flattened out somewhat and while quotations showed little change the market was actually weaker. Inquiries were very few. Sales were all of small volume, some of them for odd lots. Spot cottons in small quantities were available in places at prices below those quoted for shipment of round lots out of southern centers. Shippers indisposed to press offerings were nevertheless eager for firm bids, and these found quick acceptance at levels substantially below the originally quoted figure.

Now that the tariff bill has passed with a 7c. duty on Egyptian cotton, some activity is not unlikely in this commodity in the near future. Actual mill demand, however, is still sluggish.

●

MEMPHIS, TENN., June 16 — Despite the dullest week of the season, insofar as spot activity was concerned, the trade here was more cheerful than in a long time; it is felt that things are now shaping for a revival of demand for cotton. Opinion is rather impressed with the possibility of the premium on July being wiped out entirely. This premium, regarded as unwarranted because it was not supported by tightness of supply of raw material, has all along been looked upon as a major deterrent to spot demand and especially with reference to forward business.

Merchants, because of the reticence of mills, have had little opportunity to book orders for deferred shipment, but conditions have been such that they would have been just as slow in accepting business, badly as they need it, as mills have been in offering it. Business for some weeks has consisted largely of buying of tenderable cotton for delivery on contract. With the discounts ahead, the contract seemed to offer the best outlet, but even this character of buying has tapered off with the rapid shrinkage in the July premium. Not so long ago July was more than 200 points over October; on Saturday's close the premium had dwindled to 46 points.

LIMITED DEMAND FOR STAPLES

Quite naturally, staples have not shared in such demand as there was for tenderable cotton; demand for staples is still confined to small orders for filling in. While some owners are holding staples for full values, no difficulty is experienced in supplying wants at concessions of anywhere from 50 to 100 points. The staple basis is officially quoted unchanged. The official quotation on strict middling 1⅛ in. staple is 150 on the July contract; 1 3/16 in., 300 on; 1¼ in., 775 on.

Exporters are getting some encouragement out of the more favorable relation between New York and Liverpool prices. Heretofore, the disparity has been such that Liverpool could ship cotton to New York.

The week was favorable from a weather standpoint, except that until about the middle of the week, night temperatures were too low for satisfactory growth of cotton. Conditions were ideal for field work. Crops are clean. The central belt needs rainfall rather badly but can get along a while longer without permanent damage. The Atlantics, the southern one-third of the Gulf States, northwest Texas and a portion of western Texas present the best crop prospects to be found at this time. Elsewhere the condition is rather below a 10-year average for the date, but good rains would make a world of difference.

Wool About to Turn Corner

Force of Adverse Factors Weakened in Market More Favorable to Sellers

BOSTON

THE wool market is registering continued slight improvement from day to day and is encouraged by the fact that large incoming supplies of domestic wool are having no influence in depressing prices. The average price of wool in this market during May was at the low point of the year so far, and this was true also of tops and yarns. The month of June is quite likely to see a turning point on technical conditions alone and should the goods market, which is carrying depleted stocks, awaken to the necessity of doing larger business, a good upward turn may be seen in mid-summer running into the fall at which times most authorities predict a very general comeback in the industrial prosperity of the nation.

WOOL FIELD NARROWER

A gigantic competitor in the shape of the National Wool Marketing Corp. is in the field and even moderate estimates allow that this union of cooperatives supported by the Government funds will handle at least a third of the 1930 clip. Several wool houses passed out of business last year and one of the largest of them will handle the selling of the wools tied up by the big pool, so that while there will be much less free wool to handle, there will be fewer competing houses in the business. The new clip in several sections of the country is moving more actively, and most of the wools acquired by Boston houses are slightly below clean price market parities.

Mill buying has been moderate during the week, prices favorable to sellers. Half-blood wool is coming in for a larger interest and the knitting and weaving trades have also been more active in quarter-blood wools. Prices on the fine wools are showing a slightly upward tendency, 31c. being asked for Ohio delaine as compared with 29c., the compartively recent low price of the year on this standard wool. There is also a larger interest shown in foreign crossbreds both New Zealand and South American, but the Australian merinos continue sluggish. Prices on scoured wools are steady, pulled wools are firm, carpet wools slow.

LARGE RECEIPTS OF DOMESTIC WOOL

Receipts of domestic wool into Boston for year to date are about 12,000,000 lb. larger than last year, but imports show a decrease of approximately 23,000,000 lb. Shipments of wool out of the city, other than by motor truck, are 22,000,000 lb. less than a year ago.

Domestic mohair for years has been a steadier selling proposition than wool, but now is getting a jolt like everything else. Outside the United States the African and Turkish clips are in strong competition for the smaller business open to producers of this material. There are approximately 1,500,000 lb. of foreign hair in bond, both the Cape and the Turkish quoted at the same price of 28 to 30c.

◆Silver Decline Hurts Carpet Wools

PHILADELPHIA.

DEPRECIATION in silver has had a marked effect upon commodities in countries of the world whose financial systems are based upon that metal. China is feeling this and evidence is to be found in drastic decline in prices of carpet wools, resulting in lower priced offerings in the American market. Carpet wools are off three cents, grease basis, from prices a month ago.

Stagnation in carpet weaving has been the second factor to bring about the lower price level, the recent showing of new lines by manufacturers having had no favorable effect upon the situation. Buyers are not operating, and this, in conjunction with silver reaction, is making a soft price condition in this raw material.

Business in woven goods has been a disappointment since openings but a gradual improvement is anticipated as business interests adjust themselves to

the new tariff law. This may take several months but the second half of the year is looked upon as offering better chances for orders than the first half of this year has done at any time for the carpet wool trade.

Raw Silk Again Declines

Steady Drop Discourages Market—Relief Will Be Slow

RAW silk continues its downward trend, and the tone of the market is decidedly pessimistic. Futures have been soft all week, with silk selling virtually at what may be offered, and very little changing hands even on that basis. Manufacturers of broadsilk are not interested in advance coverage, no matter what the price is. There is a better tone at the spot end, and a fair amount of orders are being placed.

Spot Market Steady

The spot market shows a wide spread between selling prices of different companies, but on the whole prices are comparatively well maintained. There was an acute downward pressure all week, to which spots showed some resistance, dropping only about 10c., while futures fell approximately 25c. The trading conditions are so unbalanced that price quotations mean practically nothing. Importers who are compelled to effect turnover will make concessions to the point of selling at a loss; the stronger firms hold off, preferring to reject business rather than cut.

No Real Improvement Near

The continued weakness is robbing the trade of the frail hope it had that conditions would improve before the warm weather set in. Now, with summer on, there is little hope of any decided pick-up for six weeks. Furthermore, there are indications that the fall season will begin later than usual. The belief in good prospects for fall is gradually taking hold, but the broadsilk weavers who have been so badly caught recently by raw silk declines, are absolutely refusing to risk duplicating that loss. They will not butt ahead for two reasons—first, the uncertainty regarding whether silk may decline further, and second, their own decision to go very cautiously in beginning fall production.

Expect Small August Activity

Normally, fall production starts in August and that month marks a pick-up in raw silk movement. This year, the August activity is expected to be less than usual, and the fall business may be delayed. Fundamentally, there seems to be no doubt of a firm and ultimately good fall season, but unless the manufacturers show a surprising increase of confidence shortly, the season will develop slowly, and raw silk improvement may be delayed in proportion.

The uncertainty as to what Japan will do with its surplus raw silk stocks also aggravates the situation. Some New York factors hoped that Japan would announce a definite date for release of this warehoused stock, which would clear the air and show the trade where it stood. However, that seems unlikely.

Japanese Position Difficult

The Japanese Government is in a difficult position. If it named Jan. 1, as some suggest, consuming industries might hold off on all except essential spot buying, hoping for a drop in prices when the stocks are released. The present position of Japan—that the stocks will be held indefinitely until the market shows real signs of stabilization—would seem to be the most reasonable, in that it would help toward confidence. That, at least, is the view of a considerable part of the New York trade.

◆Slight Improvement In Hosiery Market

DEMAND for both half-hose and full-fashioned is slightly better, and buyers are less disposed to bargaining. However, the market has not yet fully assimilated the clearance merchandise which has been floating about for the past few months, and mill agents continue to complain of strong price emphasis in buying. Current orders are all small and for spot delivery. Half-hose made to retail at 25c. and 35c. shows some activity, the preference being for solid colors of conservative shades, with simply designed clocks.

Interest in the new dull-luster hosiery is focused partly on the pending question of the Westcott patent, and partly on the retail market. Stores are doing a spotty business on these lines; some large retailers in the Middle West and on the Coast report spirited demand, and a few big New York stores are reordering, but as a whole the consumer demand for the dull-luster numbers has not come up to expectations. Mill men note a better movement of crepe-twist yarn stockings than of those made from grenadine twist yarns, which may be due to the hesitancy of distributors to handle the former until the patent situation is clarified.

Lightweight Underwear Active

Rayons and Cottons Moving; Heavyweights Only 60% Sold

LIGHTWEIGHT knitted underwear, both cotton and rayon, is stronger, and buyers are placing business confidently. Orders are small but frequent. Several mill representatives report the May and June sales on these lines to be ahead of the same months last year.

The call for two-piece rayon suits is particularly active, and indications are that late demand for synthetic yarn merchandise may balance up for its weak start. The mills that are selling rayon underwear slightly below last year's prices have no difficulty in effecting a quick turnover. Production is steady, but there are no sizeable quantities on hand in the mills. Producers look for lightweight demand to begin its decline shortly after Independence Day.

Balbriggans are quiet but firm. There is a fair amount of business available, and mills have enough orders to carry on, though most of them could do with more business. Nainsooks are quiet.

Heavyweights Spotty

The heavyweight situation is spotty. Large producers claim to be in a satisfactory position, with good advance bookings; these producers will begin shipments about July 15, and, while they could all do with more business, they insist that a substantial quantity of orders is being placed. It is clear that the first half of 1930 will end poorly for the enire heavyweight underwear division. One company which has fared better than most places the January-to-June volume at 90% of normal, so it is evident that the bulk of the trade did a total business well below the figures of other years. The chief hope of these knitters now is that August-September demand will be large enough to at least partially make up the difference. At present future commitments are decidedly off. One estimate is that less than 60% of the trade has bought its fall requirements.

The stock situation on heavies is fairly satisfactory. Most of the larger mills have curtailed output, and there are no large stocks on hand. Any high-pressure buying in August would bring a quick stiffening of the market, thus improving the seller's position.

Speculation in the market as to the decline in consumer call for heavyweights, has been stimulated by the recent announcement that a leading producer of these garments would go

into the sweater business. Factors this week expressed the opinion that the increased business at the lightweight cotton and rayon end came from balbriggans rather than from heavyweights.

Good Bathing-Suit Call

Warm Spell May Prolong Season, Mill Men Say

THE current warm weather is effective in spurring bathing-suit reorders, and mail agents are hopeful that the demand will continue well into July. Reordering did not wane until the second week of July last year, and it seems likely that the present season's activity will last at least until that time. Some factors predict that there will be no real decline in buying before July 15.

At present, there is plenty of business available, and some mills have caught up with their contracts sufficiently to make spot shipments. This is not a general condition, however; jobbers who are low on stocks have difficulty in getting immediate delivery. Current orders are mostly for high colors in women's sunbacks, and for navies, blacks and grays in men's speedsuit models. Bathing-suit production continues at high pressure, but mills expect to begin curtailment in a comparatively short time.

MARKET FIRM

The market continues firm, and the tone is confident. Bathing-suit producers have enjoyed a very good season to date, though it is too early to make any real estimate; the next four weeks will be a big element in deciding the success of the season, knitters point out. Jobbers and retailers are expected to continue active buying; the jobbers have but small stocks on hand, due to hand-to-mouth buying.

Other outerwear markets are steady. Call for rayon berets continues spirited, but the pressure has eased somewhat, due to increased output; mills are making spot shipments for the most part. Rayon polos also are moving steadily. Lightweight fancy sweaters have improved slightly.

Fall Broadsilks Selling

Moderate Demand Reported —Summer Chiffons Cleared

THIS week brings the end of the bulk of summer chiffons, and interest in the broadsilk market has turned definitely to fall fabrics. There is no great volume of business being placed at any end, but some mills report fair future commitments on cantons, metals and velvets. The tone of the market is better; weavers are encouraged by the growing confidence shown at the cutter and retail end, and they look for a moderate future business through July.

Both transparent and chiffon velvets are selling steadily for fall, all orders being small. The preference is for brown shades, and a wide variety of browns is offered. Sales managers see brown as an outstanding fall color in velvets. Other shades stressed are blue, green, wine and black. The call for the heavy chiffon velvet is interpreted as possibly meaning, a turn toward the stiffer fabrics in all lines.

Buyers covering for fall show a gradually increasing confidence, but they are still feeling their way, and caution is the rule. Both plain and printed cantons are selling for August shipment. An increase in buying is expected when the retailers make their mid-summer visits to New York.

Shantungs are selling steadily, but orders are lighter. Metals are moving for fall; transparent print metals for the dress trade have proved popular and a fair fall business on these has already been placed.

Production now centers on fall samples. Mills all are restricting output, pending response at the consuming end. The feeling is that the second half of the year will be more active, but mill men are not disposed to proceed on this theory until they have some tangible consumer response to support it.

◆Wool Goods Spirit Aided by Tariff

WOOL goods sellers feel relieved that the tariff question has finally been placed in the background. This, it is believed, gave a steadying influence to raw wool at a time when securities and commodities were declining under a heavy wave of liquidation. Generally, it is felt that the prices of raw wool will stay at present levels.

Certain sellers of popular priced goods report that recent duplicating has been quite satisfactory, all things considered. Not more than a handful of the mills are able to make such a statement, but these same few mills seem to be getting practically all the business available.

Manufacturing-retailers and chain-store operators have shown no further disposition to place orders. On the other hand, the tailors-to-the-trade have placed a volume of business which is only slightly less than last year. Their initial orders for fall were on a wider variety of patterns although pieces per style were fewer. They are expected to start placing repeats soon after the middle of July, and it is hoped that this business will run over into late September. If this is the case, it will take up much of the slack that usually occurs when new lines are shown.

It will not be surprising if spring lines are held back until well after Labor Day. In any event, many hope that this will be the case. It is useless, they declare, to offer new fabrics and then wait for two weeks before any buying commences; by that time, buyers want to see something new.

◆Cotton Decline Unsettles Goods

AT THE early part of the current week, cotton goods merchants found it difficult to give an opinion on the market. The stock market and commodity markets declined considerably and cotton was swept along in the general rush of liquidation. Further low quotations were heard on a variety of constructions, but many sellers were inclined to doubt that any quantity goods could be purchased at some of the figures reported. It was believed that, should inquiry become more plentiful, a good many of the low quotations would be withdrawn quickly. Goods prices were purely nominal with a wide spread between bids and offers. Buying offers were very scarce and, for that matter, sellers were not inclined to offer goods freely.

The week preceding this unsettlement in financial circles, cotton goods business was on more of an even keel. Sales had been on about the same level as for the previous week and the forecast was that June might be an improvement over May. Activity was irregular and at no time was there a sustained demand, however, weekly totals showed signs of an improvement in several centers.

The cotton market has seemed bottomless, and mill men have expressed their disappointment at the action of July cotton. It was stated, in a most guarded manner, that it could not possibly go much lower. The raw market, however, has been very hard to fathom and goods sellers have found themselves wrong so many times this year that they are chary about expressing a definite stand.

QUOTATIONS

at close of business, June 18, 1930
Prices cover average qualities unless otherwise stated

Cotton Goods

	June 18	June 11	June 19 1929
PRINT CLOTHS			
27 -in., 64x60, 7.60.	4 -4⅛c.	4¼-4⅜c.	4½-5 c.
38½-in., 64x60, 5.35.	5½-5¾c.	5¾-5¾c.	7 3/16-7¼c.
39 -in., 68x72, 4.75.	6¼-6¾c.	6⅝-6¾c.	8 -8½c.
39 -in., 72x76, 4.25.	-7¼c.	7¼c.	9¼c.
39 -in., 80x80, 4.00.	-8¼c.	8½-8⅝c.	10c.
BROWN SHEETING			
36-in., 56x60, 4.00...	7⅛-7¼c.	7¼-7½c.	8½c.
36-in., 48x48, 3.00...	8½-8⅝c.	8½-8¾c.	10-10⅛c.
37-in., 48x48, 4.00...	6½-6¾c.	6¾-6¾c.	7½- 7⅝c.
PAJAMA CHECKS			
36½-in., 72x80, 4.70.	6½-6¾c.	6¾c.	8⅞-8¼c.
36½-in., 64x60, 5.75.	5½-5¾c.	5¾c.	7 c.
MISCELLANEOUS			
Drills, 37-in., 3 yd..	8⅜c.	8⅜c.	10⅛-10½c.
Denims, 2.20.....	15c.	15c.	17c.
Tickings, 8 oz.....	18-19½c.	18-19½c.	22-23½c.
Standard prints.....	8 c.	8 c.	9 c.
Eastern staple ginghams, 27-in.....	10c.	10c.	10½c.

Cotton Waste

Peeler comber	12 —12½
Peeler strips	11 —11½
Sak. comber	11 —11½
Choice willowed fly	5½— 6
Choice willowed picker	4½— 5
Sak. strips	14 —15
Linters (mill run)	3 — 3½
White spooler (single)	9 — 9½

Cotton Yarn

(Carded yarn quotations are nominal)

CARDED—(Average Quality)

Double carded 2c.-4c. higher, according to qliauty

SINGLE SKEINS OR TUBES—(Warp Twist)

4s to 8s...	$0.24 -0.24½	20s.....	$0.26½
10s.....	.24½- .25½	24s.....	- .29
12s.....	.25 - .25½	26s.....	- .30
14s.....	.25½- .26	30s.....	- .31
16s.....	- .26	40s ex. qual.	.44 - .45

TWO-PLY SKEINS AND TUBES

8s-2.....	$0.24½	26s-2.....	$0.30
10s-2.....	- .25	30s-2.....	- .31
12s-2.....	- .25½	36s-2.....	.37½- .38
14s-2.....	.25½- .26	40s-2.....	.39 - .40
16s-2.....	- .26	40s-2 hi b'k	.43 - .45
20s-2.....	- .26½	50s-2.....	- .49
24s-2.....	- .29	60s-2.....	- .56

SINGLE WARPS

10s.....	$0.24½-0.25	24s.....	$0.29½- .30
12s.....	- .25	26s.....	.30½- .31
14s.....	- .25½	30s.....	.32½- .33
16s.....	.25½- .26	40s ex. qual.	.45 - .46
20s.....	.26 - .26½		

TWO-PLY WARPS

8s-2.....	$0.25	24s-2.....	$0.30 - .30½
10s-2.....	- .25½	26s-2.....	- .31
12s-2.....	.25½- .26	30s-2.....	- .31½
14s-2.....	- .26	40s-2 ordin.	.39 - .40
16s-2.....	.26 - .26½	50s-2.....	.49 - .50
20s-2.....	- .26½	60s-2.....	.57 - .58

8s-3 and 4-ply skeins and tubes; tinged, 20-21; white, 24½; waste, 19-20

HOSIERY CONES (Frame Spun)

8s.....	$0.24	22s.....	$0.27½-0.28
10s.....	.24 - .24½	24s.....	.28½- .29
12s.....	.24½- .25	26s.....	.29½- .30
14s.....	.25 - .25½	30s tying..	.30½- .31
16s.....	.25½- .26	30s reg....	.32 - .32½
18s.....	.26 - .26½	30s ex. qual.	.34½- .35
20s.....	.26½- .27	40s.....	.40 - .41

COMBED PEELER—(Average Quality)

TWO-PLY—(Knitting Twist) Cones

20s-2.....	$0.41 -0.42	60s-2.....	$0.60
30-s.....	.45 - .46	70s-2.....	.69 - .71
36s-2.....	.46 - .47	80s-2.....	.81 - .82
40s-2.....	.47 - .48	90s-2.....	1.02 -1.05
50s-2.....	.53 - .54	100s-2.....	1.20 -1.25

WARPS, SKEINS AND CONES

TWO-PLY—(Warp Twist)

20s-2.....	$0.42 -0.43	60s-2.....	$0.61 -0.62
30s-2.....	.46 - .47	70s-2.....	.71 - .72
36s-2.....	.47 - .48	80s-2.....	.82 - .83
40s-2.....	.48 - .49	90s-2.....	1.04 -1.07
50s-2.....	.54 - .55	100s-2.....	1.22 -1.25

SINGLES

12s.....	$0.34½-0.35	30s.....	$0.44 -0.44½
14s.....	.35 - .35½	38s.....	.46½- .48½
16s.....	.35½- .36	40s.....	.48 - .48½
18s.....	.36 - .36½	50s.....	.52 - .52½
20s.....	.37 - .37½	60s.....	.60 - .61
24s.....	.39½- .40	70s.....	.70 - .71
28s.....	.42½- .43	80s.....	.82 - .83

MERCERIZED CONES—(Combed, Ungassed)

26s-2.....	$0.59 -0.61	90s2.....	$1.37-$1.40
30s-2.....	.60 - .62	100s-2.....	1.67 -1.70
36s-2.....	.63 - .65	120s-2.....	2.07 -2.10
40s-2.....	.65 - .66	30s.....	- .75
45s-2.....	.67 - .70	40s.....	- .80
50s-2.....	.69 - .72	50s.....	- .85
60s-2.....	.77 - .79	60s.....	- .90
70s-2.....	.91 - .94	70s.....	-1.05
80s-2.....	1.04 -1.07	80s.....	-1.25

Cotton Prices and Statistics

COTTON STATISTICAL DATA

(Fluctuations of Futures)

	Closed June 12	—For Week— High	Low	Closed June 18	Net Change
June.....	14.53	14.53	13.44	13.44	—1.09
July.....	14.69	14.98	13.20	13.61	—1.08
August...	14.20	14.20	12.75	13.00	—1.20
September	14.00	14.00	12.75	13.10	— .90
October...	13.98	14.08	12.85	13.17	— .81
November	14.03	14.03	12.97	13.18	— .85
December	14.11	14.15	12.96	13.30	— .81
January..	14.08	14.10	12.98	13.30	— .78
February.	13.95	13.95	13.01	13.16	— .79
March....	14.04	14.09	12.92	13.26	— .78
April.....	14.11	14.11	13.19	13.35	— .76
May.....	14.18	14.20	13.05	13.37	— .81

MIDDLING SPOT FLUCTUATIONS FOR WEEK

	New York	New Orleans	Liverpool
Friday, June 13.....	14.50	13.65	Holiday
Saturday, June 14.....	13.95	13.18	Holiday
Monday, June 16.....	13.45	12.60	7.61
Tuesday, June 17.....	13.55	12.74	7.50
Wednesday, June 18....	13.70	12.74	7.39
Thursday, June 19.....	13.95	13.10	7.71

SPOT FLUCTUATIONS AND STOCKS

Markets	June 11	June 18	Sales	Stocks This Week	Stocks Last Year
Galveston....	14.45	12.80	1,012	211,029	152,282
New Orleans	14.29	12.74	450	431,497	184,162
Mobile.....	14.00	12.55	.....	12,657	20,208
Savannah..	14.13	12.71	6	81,581	24,404
Norfolk.....	14.38	13.13	262	52,669	50,446
New York..	15.10	13.70	200	221,543	168,492
Augusta....	14.00	12.75	2,618	58,325	43,826
Memphis...	13.40	11.95	1,641	203,810	91,296
St. Louis...	14.65	13.00	.....	8,577	13,132
Houston....	14.25	12.75	4,666	612,951	258,857
Dallas.....	14.15	12.60	1,168	.....	.....

BASIS MIDDLING

	Saturday June 14	Saturday June 7
10 markets average	12.85	14.56
Memphis	12.25	14.00

PREMIUM STAPLES

First Sales from Factors Tables at Memphis

Grade Strict Middling	Prices Nominal
1⅛-in	14.95-15.35c.
1 3/16-in	16.65-17.00c.
1¼-in	21.25-21.75c.

CURRENT SALES

	For Week	Prev. Week	Week Before
Memphis total	2,594	3,466	5,778
F.o.b. included in total	2,045	2,779	3,921
10 markets	9,595	11,958	14,988

MEMPHIS RECEIPTS, SHIPMENTS, ETC.

	For Week	Last Year	Year Before
Net receipts	1,430	1,712	2,109
Gross receipts	8,951	8,079	10,002
Total since Aug. 1, net	931,692	856,154	661,264
Shipments	19,529	19,455	18,245
Total since Aug. 1	1,792,964	1,772,535	1,420,411
Total stock	206,320	100,317	128,601
Decrease for week	10,578	10,376	10,765
Unsold stock in hands of Memphis factors	31,101	6,290	.....
Decrease for week	3,063	132	.....

AVERAGE PRICE APRIL-MAY SHIPMENT HARD WESTERN COTTON

	F. o. b. New England Middling	St. Middling
1 1/16 in	15¼-15¾c.	16 -16¼c.
1⅛ in	15 -16¼c.	16¼-17¼c.
1 3/16 in	18 -19 c.	19 -20 c.
1¼ in	23 -24 c.	25½-26½c.

Basis on New York, July, 13.61c.

DIFFERENCES ON AND OFF MIDDLING WHITE GRADES

	Dallas	Memphis	Montgomery	Augusta	Average
M. F.....	1.05†	1.00†	1.00†	1.00†	1.00†
S. G. M.....	.90†	.85†	.90†	.88†	.86†
G. M.....	.75†	.75†	.75†	.75†	.72†
S. M.....	.50†	.50†	.50†	.50†	.50†
S. L. M.....	.75*	.65*	.65*	.75*	.71*
L. M.....	1.75*	1.75*	1.50*	2.00*	1.73*
S. G. O.**....	3.00*	2.75*	2.50*	3.25*	2.88*
G. O.....	3.00*	2.75*	2.50*	3.25*	3.93*
YELLOW TINGED					
G. M.....	.50*	.25*	.50*	.50*	.55*
S. M.....	1.00*	.75*	1.00*	1.00*	1.05*
M.**.....	1.75*	1.25*	1.50*	1.50*	1.65*
S. L. M.....	2.50*	1.75*	2.25*	2.25*	2.32*
L. M.**.....	3.50*	2.25*	3.00*	3.00*	3.22*
YELLOW STAINED					
G. M.....	1.50*	1.75*	1.50*	1.50*	1.55*
S. M.**.....	2.25*	2.50*	2.50*	2.50*	2.40*
M.**.....	3.00*	3.00*	3.50*	3.50*	3.20
BLUE STAINED					
M. G.**.....	1.75*	1.50*	1.75*	1.75*	1.70*
S. M.**.....	2.25*	2.25*	2.75*	2.75*	2.45*
M.**.....	3.00*	2.75*	3.75*	3.75*	3.23*

**Grades not deliverable on contract. †On Middling
*Off Middling.

EGYPTIAN COTTON

June-July Shipment c.i.f.	Boston	Change
Fully good fair Sak	30.35	.....
Fully good fair to good uppers	22.40	.....

(By John Malloch & Co.)

Alexandria Exchange, June 4		
July Sak	28.00	....
August uppers	15.55	0.90

Wool

OHIO, PENNSYLVANIA AND WEST VIRGINIA (IN GREASE)

Fine delne..	$0.30 –$0.31	¾ blood.....	$0.29 –$0.30
Fine clthg..	.23 – .24	½ blood.....	.29 – .30
¼ blood.....	.29 – .30		

TEXAS AND CALIFORNIA (CLEAN BASIS)

Texas, 12 months	$0.73 –$0.75
California, Northern	.65 – .68

PULLED—EASTERN (CLEAN BASIS)

A-A.....	$0.78 –$0.80	B-Super...	$0.58 –$0.63
A-Super....	.65 – .70	C-Super...	.53 – .55

MONTANA, IDAHO AND WYOMING (CLEAN BASIS)

Staple fine	$0.75 –$0.78
Staple ½ bld.	.70 – .73
Fine and fine medium	.70 – .72
¾ blood	.60 – .63
½ blood	.55 – .58

MOHAIR—DOMESTIC

Best Carding	$0.38 –$0.40
Best combing	.53 – .55

MOHAIR FOREIGN (IN BOND)

Turkey fair, average	$0.28 –$0.30
Cape firsts	.28 – .30

FOREIGN CLOTHING AND COMBING (CLEAN BASIS IN BOND)

Australia:	
70s	$0.65 –$0.70
64s	.53 – .55
58s-60s	.46 – .48

(IN GREASE)

Montevideo:	
58-60s	$0.25 –$0.26
56s	.25 – .26
50s	.23 – .24
Buenos Aires:	
4s, 40-44s	$0.21 –$0.22
5s, 36-40s	.20 – .21

FOREIGN CARPET (GREASE BASIS IN BOND)

Aleppo	$0.30 –$0.31
China: Combing No. 1	.17 – .19
China Filling Fleece	.16 – .17
Szechuen ass't	.17 – .18
Cordova	.17 – .18
Scotch black face	.20 – .21
East India: Kandahar	.26 – .27
Vican'r	.28 – .30
Joria	.29 – .31

Worsted Yarns

ENGLISH SYSTEM WEAVING

2-20s, 36s	$0.92½–$0.95
2-24s, 40s	1.02½– 1.05
2-26s, 44s	1.10 – 1.12½
2-28s, 46s	1.15 – 1.17½
2-30s, 48s	1.20 – 1.22½
2-32s, 50s	1.25 – 1.27½

(Single yarns 5c. less than above)

2-36s, 58s	$1.35 –$1.40
2-40s, 60s	1.47½– 1.50
2-40s, 64s	1.55 – 1.57½
2-50s, 66s	1.72½– 1.75
2-60s, 70s	2.15 – 2.20

ENGLISH SYSTEM KNITTING

2-20s, 44s in oil	$0.95 –$0.97½
2-20s, 50s in oil	1.07½– 1.10
2-20s, 56s in oil	1.17½– 1.20
2-20s, 60s in oil	1.32½– 1.35
2-20s, 64s in oil	1.40 – 1.42½
1-15s, 46s dyed	1.15 – 1.17½
1-15s, 48s dyed	1.17½– 1.20
1-15s, 50s dyed	1.20 – 1.22½

(Oil yarns 17½c. less)

FRENCH SYSTEM

1-20s, 58s	$1.22½–$1.25
1-20s, 60s	1.27½– 1.30
1-26s, 64s	1.30 – 1.32½
1-30s, 60s, Warp	1.45 – 1.47½
1-30s, 64s, Warp	1.50 – 1.52½
2-30s, 64s, Fancy mixes	1.70 – 1.72½
2-40s, 64s, Zephyrs	1.65 – 1.70
1-50s, 66s	1.65 – 1.67½
2-50s, 66s	1.80 – 1.82½
1-60s, 70s	2.07½– 2.10
2-60s, 70s	2.25 – 2.30

FRENCH SPUN MERINO WHITE

1-30s, 50-50-58s on cops	$1.05 –$1.07½
1-40s, 50-50-60s on cops	1.20 – 1.25
1-40s, 50-50-64s on cops	1.22½– 1.25
1-40s, 50-50-64s Australian cops	1.30 – 1.35

Underwear mixes, 3c. additional.
Solid color, 35c. additional.

◆

Tops and Noils

TOPS—BOSTON

Fine (64-66s)	$0.98 –$1.00		
Half-blood (60-62s)	.91 – .93		
High ¾ blood (58s)	.83 – .85		
Aver. ¾ blood (56s)	.80 – .83		
Low ¾ blood	.78 – .80		
High ½ blood (50s)	.73 – .75		
46s S. A. and N. Z.	.65 – .70		
44s S. A and N. Z.	.65 – .68		
40s S. A and N. Z.	.63 – .65		

TOPS—BRADFORD, ENG. (JUNE 12)

Fine (70s)	31½d	¾ bld. (56s)	22d
Fine (64s)	29d	½ bld. (50s)	18d
½ bld. (60s)	26½d	Cross-bred (46s)	16d
¾ bld. low (58s)	24d		

NOILS—BOSTON

Fine	$0.57–$0.60	High ½ bld..	$0.44–$0.47
Half-bld....	.53– .55	Low noils...	.40– .42
Aver. ¾ bld..	.45– .48	Medium colored...	.40– .42
Fine colored	.46– .48		

Wool Substitutes

WOOL WASTE

Lap, fine white	$0.83 –$0.88
Lap, fine colored	.58 – .63
Hard ends, fine white	.65 – .68
Hard ends, ½ blood white	.45 – .48
Hard ends, fine colored	.30 – .33
Hard ends, medium colored	.23 – .28
Card, fine White	.35 – .38
Burr, fine Carbonizing	.38 – .43

OLD WOOLEN RAGS (GRADED FOR MFRS.)

Merinos, Coarse Light	$0.06½–$0.07
Merinos, Fine Dark	.04½– .05
Merinos, Fine Light	.15½– .16½
Serges, Blue	.08½– .09
Serges, Black	.08 – .09
Serges, Red	.11 – .11½
Knit, White	.32 – .33
Knit, Red	.16 – .17
Knit, Light Hoods	.17 – .18
Worsted, Light	.05½– .06
Worsted, Blue	.08½– .09
Worsted, Black	.08 – .09

Silk Yarns

THROWN SILK (60 day basis)

Japan organzine, 2 thd. grand XX in skeins	$5.25
Japan organzine, 2 thd. sp. crack in skeins	4.90
Japan crepe, 3 thd. grand XX in bobbins	5.15
Japan crepe, 3 thd. sp. crack on bobbins	5.00
Japan crepe, 4 thd. crack on bobbins	4.90
Canton crepe, 3 & 4 thd. ns. 14/16 on bobbins	2.90
Tussah tram, 2 end on cops	2.00
Hosiery tram, 3 thd. Japan XXX	5.75
Hosiery tram, 4 thd. Japan, selec. gd. XX	5.25
Hosiery tram, sp. crack XX	4.50
Hosiery tram, crack XX	4.40
Hosiery tram, XX	4.30

SPUN SILK YARNS—(Terms: net 30)

40/2	$3.85	60/2	$4.20
50/2	4.05	62/1	3.00

Raw Silk

(60 day basis)
Prices Nominal

	Spot	New Season
Japan filature, grand XX, 13/15	$4.15	$3.55
Japan filature, sp. crack XX, 13/15	4.05	3.45
Japan filature, crack XX, 13/15	3.95	3.35
Japan filature, XX, 13/15	3.75	3.25
Japan filature, best X, 13/15	3.70	3.20
Canton filature, new style, 14/16	1.85	1.55
Canton filature, new style, 20/22	1.75	1.45
Tussah filature, 8 cocoon	1.55	1.25
Grand XX (Yellow) 20/22	3.40	3.05
Grand XX (White) 20/22	3.45	3.15
Sp. crack (Yellow) 20/22	3.40	3.00
Sp. crack (White) 20/22	3.40	3.05
Crack (Yellow) 20/22	3.30	2.85
Crack (White) 20/22	3.35	2.95

NATIONAL RAW SILK EXCHANGE

	Close June 11	For the Week High	For the Week Low	Close June 17	Net Chge.
June	3.67	3.70	3.38	3.38	— .29
July	3.45	3.45	3.15	3.25	— .20
August	3.45	3.45	3.15	3.19	— .26
September	3.38	3.41	3.12	3.17	— .21
October	3.38	3.40	3.12	3.17	— .21
November	3.38	3.41	3.11	3.17	— .21
December	3.38	3.41	3.12	3.17	— .21
January	3.38	3.41	3.12	3.16	— .22

June 11 to June 17—Total contracts, 704. Total number of bales, 7,040. Total approximate value, $2,816,000.

Domestic Rayon

VISCOSE PROCESS

Denier	Filament	First	Second
50	14	$2.30	$2.00
75	18	1.85	1.65
75	30	1.95	1.75
100	18	1.45	1.35
100	40	1.50	1.40
125	18	1.45	1.25
125	36	1.30	1.20
150	24	1.15	1.10
150	32	1.15	1.10
150	36	1.20	1.15
150	60	1.35	1.30
150	75	1.50	....
170	24–27	1.15	1.10
170	60	1.35	1.30
200	30	1.05	1.00
200	32	1.10	1.05
200	60	1.30	1.25
300	44	.95	.90
400	72	1.10	.95
450	54	1.00	.95
600	72–96	1.00	.95
900	100–144	1.00	.95

NITRO-CELLULOSE PROCESS

Denier	First Qual.	Second Qual.	Denier	First Qual.	Second Qual.
35	$3.50	$3.25	125	$1.30	$1.20
50	2.25	1.90	140	1.15	1.10
75	1.85	1.65	150	1.15	1.10
100	1.45	1.35	160	1.15	1.10
			175	1.15	1.05

CUPRAMMONIUM PROCESS

Denier	Filament	Price	Denier	Filament	Price
15	25	$4.15	40	30	$3.15
25	25	3.65	52	30	3.00
30	25	3.40			

(Due to diversified offerings prices for higher denier are not listed.)

ACETATE PROCESS

Denier	Price	Denier	Price
45	$2.75	120	$1.90
55	2.55	150	1.60–1.85
75	2.25–2.70	200	1.55
100	2.00–2.45	300	1.50

Rayon Waste

Prices Nominal

Open bleached waste	–$0.22
Open unbleached waste	$0.18 – .20
Bleached thread waste (mfs.)	– .12
Bleached thread waste (misc.)	.11 – .12
Colored thread waste	.08 – .10
Colored clips	– .08

CONVERTED RAYON WASTE

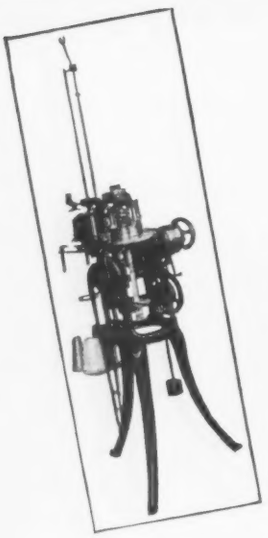
Bleached tops	–$0.49
Unbleached tops	– .43
Bleached noils	– .18
Bleached garnets	– .18
Unbleached garnets	– .16
Colored garnets	– .14

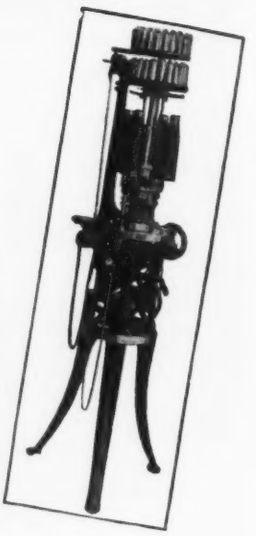
Silk Waste

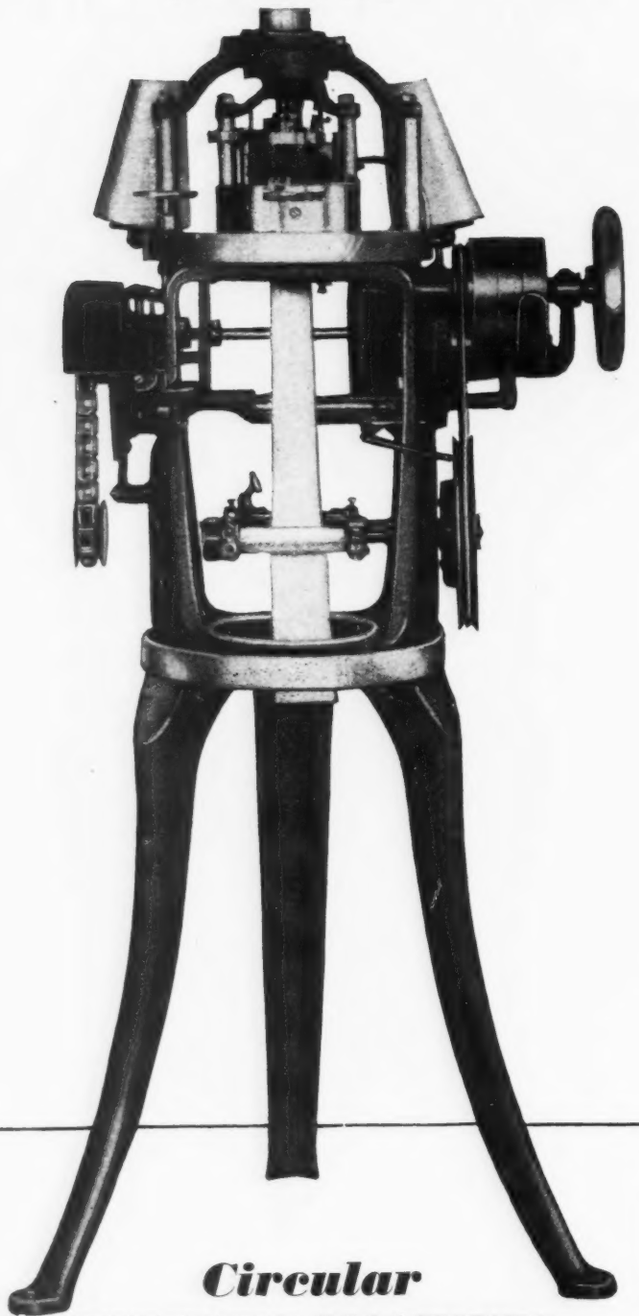
Kibizzo Kikai Grand XX	$0.85
Kibizzo Kikai Triple Extra	.92
Frison Grand Double	.90
Pierced Cocoons	1.12

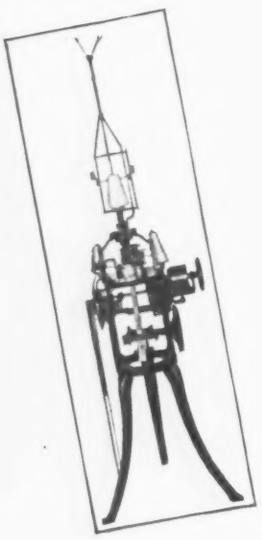
ALL TRUE-RIB

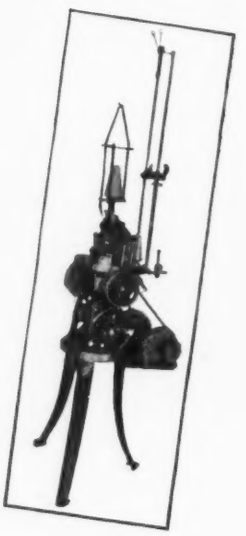
(Patented or patent pending)

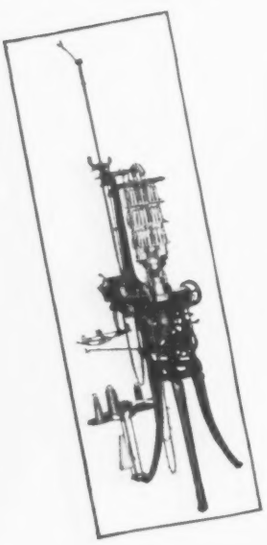


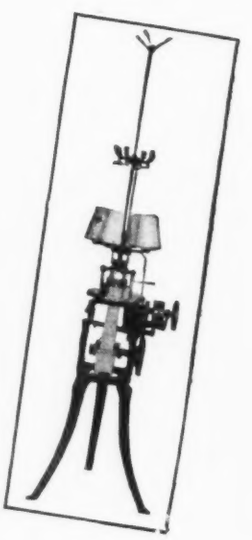












Circular

KNITTING MACHINES
BRAIDING MACHINES
CREASING MACHINES

FIDELITY MACHINE CO.
3908-18 Frankford Avenue
PHILADELPHIA, PA.

THE FIDELITY UNIVERSAL RIBBER

Southern Mill Securities

(A. M. Law & Co., Spartanburg)

	Bid	Asked
Abbeville Cotton Mills	..	60
Anderson Cotton Mills	69	73
Arcade Cotton Mills	..	60
Arcadia Mills	230	250
Arcadia Mills, pfd	100	102
Arkwright Mills	..	80
Augusta Factory, Ga	..	20
Avondale Mills, Ala	1100	1150
Beaumont Mfg. Co	250	300
Beaumont Mfg. Co. 7% pfd	99	102
Belton Mills	..	25
Belton Mills, pfd	75	80
Bibb Mfg. Co	105	110
Bibb Mfg. Co. 6% pfd	99	102
Brandon Corp., A	50	55
Brandon Corp., B	..	7
Brandon Corp., pfd	85	90
Calhoun Mills	88	95
Chadwick-Hoskins Co. (par, $25)	10	13
Chesnee Mills	..	75
Chiquola Mfg. Co	250	260
Chiquola Mfg. Co., pfd	91	94
Clifton Mfg. Co	99	110
Clinton Cotton Mills	250	280
Columbus Mfg. Co., Ga	80	90
Cowpens Mills	..	35
D. E. Converse Co	90	97
Dallas Mfg. Co., Ala	..	70
Darlington Mfg. Co	40	51
Drayton Mills	110	..
Dunean Mills	120	125
Dunean Mills, pfd	100	102
Eagle & Phenix Mills, Ga	..	65
Easley Cotton Mills, pfd	45	55
Enterprise Mfg. Co., Ga	..	100
Fairforest Finishing Co., serial notes	98	100
Florence Mills	50	55
Florence Mills, pfd	99	102
Gaffney Mfg. Co	..	35
Gainesville Cotton Mills, Ga	150	160
Glenwood Mills	95	100
Gluck Mills	73	77
Gossett Mills	65	70
Graniteville Mfg. Co	..	100
Greenwood Cotton Mills	400	..
Grendel Mills, pfd. (par, $50)	45	48
Hamrick Mills	..	100
Hartsville Cotton Mills	130	140
Hunter Mfg. & Com. Co., pfd	88	92
Industrial Cotton Mills Co., pfd	..	34
Inman Mills	120	130
Inman Mills, pfd	100	..
Judson Mills, A, pfd	103	106
Judson Mills, B, pfd	100	102
King, John P. Mfg. Co., Ga	80	90
Lancaster Cotton Mills	265	..
Laurens Cotton Mills	..	125
Limestone Cotton Mills	..	100
Lydia Cotton Mills, serial notes	99	101
Marion Mfg. Co., N. C.	115	120
Marlboro Mills	..	15
Mills Mill, pfd	95	99
Mollohon Mfg. Co., pfd	98	102
Monarch Mills	115	121
Musgrove Cotton Mills	0	40
Newberry Cotton Mills	110	113
Ninety-Six Mills	400	..
Norris Cotton Mills	..	45
Orr Cotton Mills	..	60
Orr Cotton Mills, pfd	85	90
Pacolet Mfg. Co	..	145
Pacolet Mfg. Co., pfd	100	103
Panola Cotton Mills, Class A, pfd. (par, $60)	58	60
Pickens Cotton Mills	110	115
Piedmont Mfg. Co	..	105
Piedmont Print Works (no par)	15	20
Piedmont Print Works, pfd	60	70
Poe, F. W. Mfg. Co	29	32
Riverside & Dan River Mills	13	15
Riverside & Dan River Mills, 6% pfd	75	80
Saxon Mills	..	75
Sibley Mfg. Co., Ga	50	60
Southern Bleachery	18	20
Southern Bleachery, Pfd	84	88
Southern Bleachery, serial notes	99	101
Southern Franklin Process	22	24
Southern Franklin Process, pfd	97	101
Southern Worsted Corp., pfd	88	92
Spartan Mills	155	..
Spencer Corp., serial notes	99	100
Union-Buffalo Mills	..	50
Union-Buffalo Mills, 1st pfd	90	93
Union-Buffalo Mills, 2nd pfd	45	50
Victor-Monaghan Co	70	72
Victor-Monaghan Co., pfd	112	117
Wallace Mfg. Co	..	105
Ware Shoals Mfg. Co	135	145
Whitney Mfg. Co	..	40
Woodside Cotton Mills Co	..	50
Woodside Cotton Mills Co., pfd	..	45
Yarn Corp. of America, gold bonds	99	10

New England Textile Stocks

Quotations at "Public Sale" are based on last sales at Boston Public Auctions and Boston Stock Exchange. Bid and Asked prices are latest quotations of leading Boston dealers.

	Public Sale	Bid	Asked
Am. Mfg. pfd	68	65	69
Amoskeag	12½	..	..
Arlington	22	21	22
Associated Textile	36½	34	37
Bates	63	80	84
Berkshire Associates, com	18½	17	20
Berkshire Associates, pfd	70	69	72
Bigelow-Sanford, com	59	..	..
Boott Mills	120½	110	120
Edwards	80½	80	85
Esmond, pfd	102	100	102
Farr Alpaca	67	70	72
Hamilton Woolen	40	38	41
Hill	18	18	23
Indian Orchard	20½	20	30
Ludlow	136	136	138
Merrimack, com	50½	50	52
Nashua, com	32½	29	32
Nashua, pfd	77½	74	76
Naumkeag	88	85	88
Newmarket	25¼	24	28
Otis	49½	47	52
Pacific	22	..	..
Pepperell	94	91	95
Plymouth Cordage	82	80	83
York	8¼	8	10

New Bedford Mill Stocks

(Sanford & Kelley, New Bedford)

	Bid	Asked
Acushnet Mill	13	15
Beacon Mfg., con	125	..
Beacon Mfg., pfd	85	87
Booth Mfg. Co., com	10	..
Booth Mfg. Co., pfd	30	..
Bristol Mfg. Co	29	32
City Mfg. Co	25	..
Dartmouth Mfg. Co., com	..	62
Dartmouth Mfg. Co., pfd	86	..
Fairhaven Mills, pfd	¼	¾
Gosnold Mill, com	..	25
Gosnold Mill, pfd	59	62
Grinnell Mfg. Co	26	29
Hathaway Mfg. Co	39	41
Holmes Mfg. Co., com	1	3
Holmes Mfg. Co., pfd	10	..
Kilburn Mill	35	..
Nashawena Mills	22½	24
N.B. Cotton Mills, pfd	12	18
Neild Mill	40	45
Nonquitt Mills	6½	7½
Pierce Mill	120	130
Potumska Mills	30	32½
Quissett Mills, com	50	..
Soule Mill	58	..
Taber Mill	15	16½
Wamsutta Mills	16	17½
Whitman Mills	6	7½
Gosnold Mill Notes	87	..
Whitman Mills 6% Notes	52½	..

Fall River Mill Stocks

(G. M. Haffards & Co., Fall River)

	Bid	Asked
Algonquin Printing Co	325	..
American Linen Co	..	..
Barnard Mfg. Co	6	12
Berkshire (com.)	..	..
Berkshire (pfd.)	..	..
Bourne Mills	12	..
Border City Mfg. Co	..	5
Charlton Mills	..	75
Cornell Mills	..	10
Davol Mills	..	6
Davis Mills	12	..
Flint Mills	15	..
King Philip Mills	..	..
Laurel Lake Mills (com.)	..	5
Lincoln Mfg. Co	12	..
Luther Mfg. Co	..	..
Merchants Mfg. Co	28	..
Narragansett Mills	..	10
Parker Mills, com	..	..
Pilgrim Mills	70	..
Richard Borden Mfg. Co	2	5
Sagamore Mfg. Co	..	72
Shove Mills	4	8
Stafford Mills	..	1
Stevens Mfg. Co	..	39
Union Cotton Mfg. Co	25	..
Wampanoag Mills	..	6
Weetamoe Mills	..	1

Textiles on N. Y. Exchanges

The following shows the movements of the leading textile stocks listed on the New York Stock Exchange and Curb for the week ended June 18:

	High	Low	Last Sale	Net Change
Adams Millis	29¾	27	27	— 2
*American Thread	3¼	3	3	— ¼
American Woolen	13	18¼	11½	— 1½
American Woolen, pfd.	35½	29¼	31½	— 3½
*Assoc. Rayon, pfd.	45¼	43	45¼	— ¾
Belding-Hemingway	4	3½	3¾	— 1¼
*Blumenthal	29	26	26	— 3
Cannon Mills	23½	20	20	— 4
Century Ribbon	4½	4	4½	— ⅜
Collins & Aikman	23¾	17½	18½	— 4½
Consolidated Textile	1½	1	1	— ¼
Duplan Silk	14½	14½	14½	— ¼
Durham Hosiery, pfd.	52½	51½	52	+ ¼
*Fabrics Finishing	4½	4¼	4⅜	— ⅛
Gotham Hosiery	12½	8½	8½	— 3½
Industrial Rayon	101	100¼	100¼	— 1
Kayser, Julius	28	24¼	25	— 3
Kendall, pfd.	77	77	77	....
Mallinson	11⅜	8	8	— 2½
Mohawk Carpet	20	18½	18½	— 1½
Munsingwear	47	41	41	— 6½
Pacific Mills	23	22	22	— 1
Phoenix Hosiery	12	12	12	— 3
*Powdrell & Alexander	40	40	40	—10
Real Silk Hosiery	46	35	35½	—11½
*Tubize Chat B	10	8½	8½	— ½
United Piece Dye Wks	24	22	22	— 5
Van Raalte	16½	16½	16½	.....

*Listed on Curb.

Textile Calendar

Silk Association of Canada, Annual Meeting, Royal York Hotel, Toronto, Canada, June 24, 1930.

•

Committee D-13, American Society for Testing Materials, Annual Meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 24, 1930.

•

Philadelphia Textile Manufacturers' Association, Fourth Annual Outing, Manufacturers' Country Club, Oreland, Pa., June 25, 1930.

•

Manufacturers' Textile Association, Annual Outing, June 26, 1930, at Pomham Club, Riverside, R. I.

•

American Association of Textile Chemists and Colorists, New York Section, Annual Outing, Elmwood Country Club, East Paterson, N. J., June 27, 1930.

Southern Textile Association, Annual Meeting, Ocean Forest Hotel, Myrtle Beach, S. C., June 27-28, 1930.

•

Worsted Yarn Spinners' Annual Outing, Manufacturers' Country Club, Oreland, Pa., Sept. 24, 1930.

•

National Safety Congress, Textile Section, Annual Meeting, William Penn Hotel, Pittsburgh, Pa., Sept. 30-Oct. 1, 1930.

•

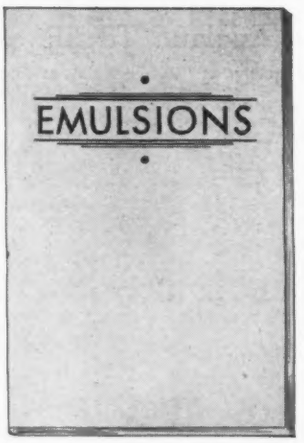
Ninth Southern Textile Exposition, Textile Hall, Greenville, S. C., Oct. 20-25, 1930.

•

Textile Division, A.S.M.E., National Meeting, Poinsett Hotel, Greenville, S. C., Oct. 22, 1930.

•

Southern Textile Association, Semi-Annual Meeting, Poinsett Hotel, Greenville, S. C., Oct. 23, 1930.



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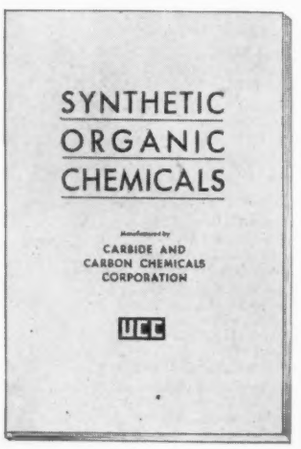

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Viscose Co. Announces Details of "Quality-Control" Plan

DETAILS of the "quality-control" plan by which the Viscose Co., manufacturers of "Crown" brand rayon yarns, aims to restrict the use of "Crown" brands label to merchandise which conforms to standard specifications, were made public at the Viscose Co.'s New York office Wednesday by Chester C. Bassett, assistant general sales manager. The plan was foreshadowed in these columns last week. Mr. Bassett announced that two booklets were in preparation, one addressed to manufacturers and one to merchants. These booklets explain the workings of the plan from the viewpoint respectively of manufacturer and distributor.

Under the new plan all previous labeling contracts are canceled, and the company is entering into a new contract-agreement with knitters and weavers to use "Crown" brand label on goods which meet definite standards. Manufacturers are invited to write for information on specifications. The manufacturers' booklet states that "anyone using our trade-mark on unauthorized goods will render himself liable to suit for injunction and damages."

The trade developments leading to the adoption of the new plan are reviewed, and the booklet adds that the manufacture of inferior goods has hurt three groups—the producer of quality yarn, the manufacturer of quality merchandise, and the store that seeks to satisfy its customers.

The Viscose Co., upon execution of contract-agreements, will license manufacturers to use or allot to trade the brand label; or to manufacture combination labels. The yarn company will advertise the label extensively to guide merchants, and will investigate retail outlets in all parts of the country, thus effecting an immediate check-up on use or abuse of the trade-mark.

The plan, it is further stated, does not encompass the styling of fabrics, apparel or other articles, but pertains solely to fabric specifications. Two types of label will be issued: The "Crown" brand standard label, and the label combining that name with the name of the manufacturer. These label rights will be issued to: weavers and knitters employing "Crown" brand rayon yarns in textiles of definite specifications; manufacturers of finished products who knit or weave their own rayon fabrics, using "Crown" brand rayon yarns according to specifications; and manufacturers of garments or other articles who purchase their fabrics from knitters or weavers.

The booklet for merchants stresses the advantages of the plan to retailers, and urges their cooperation by instructing sales people on the arrangement and by helping in "preventing the abuse of this labeling plan by unreliable manufacturers." The stores are requested to report to the Viscose Co. any irregularities regarding the plan.

Cordial approval and endorsement of the plan has been voiced by numerous leading figures in the trade, among them P. C. Debry, president of the Duplan Silk Corp., and E. A. Clements, president of the Globe Knitting Works, Grand Rapids, Mich. Both pledge their cooperation and express their confidence in the benefits that can accrue to consumer, retailer and manufacturer from the successful operation of the Viscose program.

Drawing-In Draft for Narrow Fabric

(Continued from page 47)

selected from more than one warp beam, indication of that fact must be made on the draft, as in harness work.

Fig. 22 illustrates a typical narrow-fabric drawing-in draft for a jacquard pattern, and signifies that the ends are to be taken from three different warp beams.

If harnesses are to be used in conjunction with the jacquard head, the ends to be drawn on the harnesses may be indicated by placing them in a section in front of the regular jacquard ends, as in a sectional draft. Drafts for harness looms which are equipped with auxiliary jacquard or dobby heads may be treated in a like manner.

This article is the sixth of a series on the design and construction of narrow woven fabrics by Edwin J. Gibbons, instructor in textile design at Samuel Slater School, Pawtucket, R. I. Dates and subjects of previous articles were as follows: edges, Nov. 16; edge wires, Dec. 28; tubular weave, Jan. 25; foundation weaves, March 1; varied effects related to the plain weave, April 5 and April 12. *All rights to the further use of these articles are reserved by the author.*

Cotton Opening and Cleaning

(Continued from page 39)

the total blows will range from approximately 70 to 90; and where two beaters are used from 40 to 70, in the case of blades and Kirschners.

When using Aldrich, porcupine, or striking beaters, the condition of the delivered stock will vary according to the speeds in use, such as beater and fan speeds, and to the relation of the surface speed of the beater to the surface speed of the feed roll. It is almost impossible to recommend a speed that will give the best results in all mills, but it is possible to recommend a speed to any given mill from which it should work as a basis for its experiments. When considering blows and also the different beater speeds, we also should take into consideration the stock itself. In comparing results in different mills we should consider how the stock is held while being acted on, and how heavy it is per yard. One mill after considerable experimenting found that the angle of the grids had more to do with the cleaning done by the picker than the many other changes that they had made.

Silk Association Defines "Grenadine"

In an effort to clear up some of the uncertainty on the use of certain twisted yarn terms in the hosiery trade, the Silk Association has offered the trade the following tentative definition of "grenadine."

"Grenadine yarn is a yarn composed of more than one thread, each individual thread of which or multiple thereof has been twisted in the same direction, all of the threads then doubled with a reverse twist, each twist having a minimum of 22 turns per inch."

The association solicits comment and recommendations regarding this definition from the trade.

Hosiery Workers Convene in Philadelphia June 23

The eighteenth annual convention of the American Federation of Full-Fashioned Hosiery Workers, will be held in Philadelphia, June 23. Among the features of the session will be an address on unemployment insurance by Dr. Paul H. Douglas, economist, of the University of Chicago, the election of officers, and discussion and action on revision of the constitution. The convention call was sent out by President Rieve, and about 90 delegates are expected to attend.

Pacific Shows New Worsteds at Style Show

Pacific Mills, worsted division, presented to the trade a mannequin revue of new fall coatings, suitings, and dress goods, at the company's office, 261 Fifth Ave., New York, late last week. Howard R. Merrill, manager of marketing of the division, welcomed the guests, following which, Miss Martha E. Dodson, sales promotion manager, gave a brief résumé of the Paris mid season openings which she attended.

N. Y. Outerwear Opening in January Favored

The Knitted Outerwear Selling Agents Association, at a meeting in New York this week, decided in favor of changing the old practice of opening new sweater lines in Chicago each November. The association recommendation, which later went before the National Knitted Outerwear Association convention at Toronto, calls for an opening in New York in January.

Textile Chemists to Hold Outing

The annual outing of the New York Section, American Association of Textile Chemists and Colorists, will be held at the Elmwood Country Club, East Paterson, N. J., on Friday, June 27. A golf tournament is scheduled to start at 10:00 a.m., with tennis in afternoon. The prizes for the winners will be awarded at the dinner, at 7:00 p.m.

Sales Worsted Yarn Statistics

Statistics prepared by the Wool Institute indicate that demand for sales worsted yarns in the French spinning group and in English knitting group was at the lowest point reached this year in April, and since that time both groups have witnessed noticeable improvement.

Sales of French spun counts totaled 453,126 lb., April of this year which compares with 755,124 lb. in May, an increase of 301,998 lb., almost doubling the volume of the previous month. In English knitting counts although the upturn has not been so apparent there has been respectable improvement, April volume being 991,035 lb., against 1,116,715 lb., for May.

In the first five months of 1930 sales of English spun worsted yarns totaled 6,552,865 lb., which is 18.9% smaller than during a similar period in 1929. Yet at this time of the year in 1929 the demand curve for English spun counts was trending downward, while the chart for this year shows that sales are expanding.

This trend is even more noticeable in French spun counts, but in these yarns the trend was the same last year in that demand began to improve the middle of April and continued to do so until August; the rate of increase in sales this year has been more rapid since middle of April than last. Total business booked by French spinners who are members of the institute, 68% of all in the United States, not so representative as their English spun group in which 80% of the spindles are included, for the first five months of 1930 is 18.2% smaller than during the same time a year ago. Figures show that sales worsted spinners will have to book much larger business during the last half of this year if they plan to equal the volume of their 1929 sales. They have made some progress toward this goal since middle of April.

Philadelphia Wool Trade Outing

Philadelphia Wool & Textile Association held their annual outing June 20 at Eddington-on-the-Delaware, a short distance from Philadelphia, more than 150 members attending. Sports of all kinds were on program. Herbert K. Webb, president, was toastmaster at the dinner and Robert E. Carre was in charge of the outing committee.

Blackstone Valley Outing

Blackstone Valley (Mass.) Mills Association is holding its ninth annual outing at Jim Smith's Inn, Lakewood, R. I., today, June 21, being joined by about 75 members of the Eastern Connecticut Mills Association, nearly all making the trip by automobile. Lunch was provided at 1:30 p.m., after which a program of sports was run off, including the annual baseball game between nines representing the north and south ends of the Blackstone Valley. There were also several boxing bouts and individual quoit matches on the program. A clambake was scheduled for 5 p.m., which concluded the program. President Gustave Schellsmidth, East Douglas, Mass., was chairman of the committee of arrangements, the other members of which were Secretary George C. Dunn, Allan Smith, Donald Barnes, John F. O'Neil, James M. Sterling, William H. Young, James M. Manning and William A. Spratt, former president.

Philadelphia Textile School Prize Winners

Prize winners announced at the close of the year by the Philadelphia Textile School are given below. The subject is named first, followed by the winner of the prize and the winner of honorable mention in that order:

Power Weaving (3rd year)—F. H. Heinrich, H. S. Harpole.
High Rating (2nd year day course)—F. Canova, R. K. Palmer.
High Rating (1st year regular course)—F. A. Benzoni, R. W. Baines.
Jacquard Silk Fabric (2nd year)—A. A. Di Censo, G. H. Klingberg.
General Excellence (second rank, 3rd year)—W. W. Humecky.
High Rating, 2 years' chemistry—Nathan Webber, R. S. Wilkinson.
Best Jacquard Design (3rd year)—A. A. Bschorr, F. L. Knecht and G. P. Shirer.
Best Jacquard Design (2nd year)—J. C. Stephenson, R. E. Isaacs and R. K. Palmer.
Power Weaving (2nd year)—R. K. Palmer, J. C. Stephenson and J. Z. Chagnon.
Jacquard Class (1st year, evening)—J. R. Johnston.
High Rating Silk Course (2nd year)—A. A. Di Censo.
Weave Formation and Analysis (1st year)—H. E. Chanut, R. Q. Millar.
Best Work on Hand Loom (1st year)—N. I. Fridlington, R. Q. Millar and F. S. C. Layman.
High Rating Cotton Class (2nd year)—R. Herzfeld.
High Rating Wool Course (2nd year)—F. S. Kaiser.
N.A.C.M. Medal (3-year course)—H. S. Harpole.
Color Harmony (1st year)—R. M. Lower, Jr., F. A. Benzoni and H. E. Chanut.
Chemistry (1st year)—J. O. Haynes.
Chemistry (3rd year)—A. Sobocinski, Jr.
Chemistry (3-year evening course)—A. D. Fisher.
Scholarship (evening school)—C. W. Tongue and W. B. Duckworth.

Gets Option on 6,000,000 lb. of Short Texas Wool

San Angelo, Tex.—An option until noon June 18 to purchase its spring accumulation here of 6,000,000 lb. of short wool was granted by Texas Wool & Mohair Warehouse Association to D. E. Hughes, San Angelo, representing Studley & Emery, Boston. Hughes was highest bidder at an auction, the second held by association in three weeks. His figure was unannounced. Peak price on Texas short wool this season has been 25c. which is about general average in Texas for both short and long fleeces.

Blackstone With Larzelere & Co.

Fred M. Blackstone, who has been Philadelphia selling representative for the New Jersey Worsted Mills, is associated with Larzelere & Co., Packard Bldg., Philadelphia, who are sales representatives for the Botany Worsted Mills, Passaic, N. J., yarn department. Mr. Blackstone will assist W. D. and Dayton Larzelere in covering the trade for this firm.

Hobbs and Cramer Resign as Directors of U. S. Research Institute

The United States Institute for Textile Research loses two of its preliminary directors as the result of the appointment by President Hoover of Franklin W. Hobbs and Stuart W. Cramer as directors of the Textile Foundation. Both have tendered their resignations to the Institute because of their belief that it would be unethical to continue as directors in a body that may become an applicant for Foundation funds. Mr. Hobbs represented on the institute board the National Association of Wool Manufacturers, of which he is president, and Mr. Cramer the American Cotton Manufacturers' Association of which he is a former president. Their successors on the institute board are yet to be appointed.

Since the recent meeting in New York City of the U. S. Institute for Textile Research two new members of the preliminary board of directors have been designated: E. L. Starr, director-treasurer of the Durene Association of America, by that body, and E. L. Clements of Grand Rapids, Michigan, by the Associated Knit Underwear Manufacturers of America.

The next and organization meeting of the Institute will be held in New York City as soon as the committee on by-laws is ready to report, that committee being Dr. E. H. Killheffer, president American Association of Textile Chemists and Colorists, P. J. Wood, acting chairman of the Institute, and C. H. Clark acting secretary.

Boston Men Hear Plans For Trading in Top Futures

The special committee of the New York Cotton Exchange which is engaged in laying plans for trading in wool top futures held a luncheon meeting with a selected number of manufacturers and wool dealers at the Chamber of Commerce Building, Boston, Mass., on June 19. John J. Pflieger, chairman of cotton exchange wool committee, introduced Julius B. Baer, attorney for the silk and other exchanges, who explained proposition in detail to the 25 men present. A discussion followed. Among manufacturers present were Messrs. Hobbs, Stevens, Stoehr, Edington and Edwards. Wool men present included Messrs. Elliott, Eisemann, Ketchum, Purdy, Schwerdt, Webb and others.

Mallinson Organizes Popular-Price Subsidiary Co.

H. R. Mallinson & Co., Inc., of New York City quality silk manufacturers have organized a subsidiary company to be known as the Original Fabrics Corp., with headquarters at 512 Seventh Ave., New York City, which will specialize in silks for the popular priced trade. The new firm will serve as a distinct and separate unit, having its own styling and production facilities.

Obituary

Edward Woolley

Edward Woolley, president of the Hamlet Textile Co., Pawtucket, R. I., killed himself at Woonsocket, R. I., June 17. Mr. Woolley, who was 61 years of age, was born in Preston, England. He went to Woonsocket from New Bedford about 35 years ago to become superintendent of the Woonsocket plant of the Hamlet Textile Co. He was later made agent of both mills of the company, serving in that capacity for 15 years. He was widely known in textile circles and was a member of the Southern New England Textile Club.

Joseph Williams

Joseph Williams, efficiency engineer of Hunter Mfg. & Com. Co., and personal representative of President H. F. Jones of that company in the operation of the Lowe Mfg. Co. mill in Huntsville, Ala., died June 11 of peritonitis. He was 31 years old. Mr. Williams was a graduate of Staunton Military Academy and studied at the Georgia Technological School. He is survived by his mother, two sisters and four brothers.

R. L. Bridger

R. L. Bridger, president of the Bladenboro (N. C.) Cotton Mills, the Bank of Bladenboro,, and the Bridger Corp., died June 16 in his 83d year at his home in that city. Surviving are his widow and eight children: Mrs. N. B. Powell, Mrs. C. O. Bridger, Henry C., R. L., Jr., J. A., and L. A. Bridger, Mrs. N. M. Singletary, and Mrs. B. M. Edwards.

D. N. Crenshaw

D. N. Crenshaw, 48 years old, who has been superintendent of the Boger & Crawford Spinning Mill, Lincolnton, N. C., for the last several years, was instantly killed in an automobile accident at Spencer, N. C., June 12. R. C. Boger, Jr., of Philadelphia, son of R. C. Boger, head of the firm of Boger & Crawford, suffered injuries in the same accident.

Henry W. Hubbard

Henry W. Hubbard, secretary of the Russell Mfg. Co., Middletown, Conn., died suddenly June 4 at Hartford, Conn., where he had gone for medical treatment. Mr. Hubbard was 63 years old and a native of Middletown. He was employed by the brake lining company for 43 years, and had been secretary since 1905.

Bernard Long

Bernard Long, finisher in the Eureka (Calif.) Woolen Mills, died recently in Seattle, Wash., following an operation for appendicitis. He was born 48 years ago in Clayville, N. Y., and had been a finisher for many years in mills in the East as well as in the West.

Luther Mims

Luther Mims, executive for many years for the American Yarn and Processing Co., died June 6 at the age of 73 at his home at Mount Holly, N. C. He was a native of Columbia, S. C., but had lived most of his life at Mount Holly.

Charles H. Davis

Charles H. Davis, 80-year-old night watchman at the Delgado Mills, Wilmington, N. C., was killed by an automobile in that city on June 15.

New Philadelphia Agent for Tubize Chatilon

E. W. Martin, formerly connected with Philadelphia office of Nyanza Mills, has become associated with Tubize Chatilon Corp., and will sell the yarns of this concern in the Philadelphia territory. Offices are located at 1600 Walnut St.

Nyanza Appoints New Selling Agent in Philadelphia

V. D. Milliken, formerly associated with the Byron G. Moon Co., New York, has been appointed Philadelphia sales representative of the Nyanza Mills, Woonsocket, R. I. Their Philadelphia offices are in Lafayette Bldg.

Woonsocket Co. Joins Rayon & Synthetic Yarn Ass'n

The Rayon & Synthetic Yarn Association at its last meeting voted to admit the Woonsocket Rayon Co., of Woonsocket, R. I., to membership, thus bringing the total firm members to fourteen. The Woonsocket company was organized early in 1928 by Manville Jencks interests.

Chautauqua Worsted Appoints Philadelphia Representative

Chautauqua Worsted Mills, Inc., Jamestown, N. Y., has announced the appointment of Harry A. Doull as Philadelphia representative. He has offices at 308 Chestnut St., and was formerly with S. B. & B. W. Fleisher, Inc., until that company discontinued spinning.

R. E. T. Haff Goes to DuPont Cellophane Co.

It was announced at the New York offices of the DuPont Rayon Co. that R. E. T. Haff, assistant director of sales in the viscose process department had been transferred to the DuPont Cellophane Co., and will be division manager of the cellulose caps unit in that organization. Mr. Haff is well known in the rayon industry and was active in the Rayon Institute, of which he was an officer for some time.

Industrial Rayon Price List

The following is the current price list of the Industrial Rayon Corp., of Cleveland, O.:

PRICE LIST—EFFECTIVE MAY 1, 1930

Denier	Filaments	Bleached Lustrous Skeins 1st	Bleached Lustrous Skeins 2nd	Unbleached Lustrous Cones 1st	Unbleached Lustrous Cones 2nd
75	18	1.85	1.65	1.95	1.75
100	40	1.50	1.40	1.60	1.50
125	50	1.35	1.25	1.45	1.35
150	30	1.15	1.10	1.19	1.14
150	40	1.20	1.15	1.24	1.19
150	60	1.35	1.30	1.39	1.34
200	40	1.10	1.05	1.14	....
300	60	1.00	.95	1.04	....
450	60	1.00	.95	....	....

Terms: 2% 30 days, discount to apply on net amount of invoice after deduction of freight allowance.

Quotations are for no definite period of time and are subject to change without notice.

Skeins are packed in cases of 200 lb. net.

Cones are packed in cases of approximately 230 lb. net.

Prices quoted are for net weight of yarn.

Business News

Rapp to Specialize on Hercules Pine Oil Sales Development

Due to increased business the Hercules Powder Co. has found it necessary to have some one devote his entire time to pine oil sales development work. F. U. Rapp, who has wide experience in this field, has been chosen to specialize on this work, it is announced by Hercules naval stores officials.

Hazard Advertising Agency Opens Boston Office

The Hazard Advertising Corp., New York, announces the opening of a branch office in Boston, Mass. This is in charge of Theron S. Curtis, who joined the Hazard organization early in May. Mr. Curtis, a graduate engineer, was a specialty engineer for the American Steel & Wire Co., Worcester, and for ten years was president of the T. I. Smith Co., manufacturing jewelers of Boston. The office address is 950 Park Square Building.

Changes Resulting from Fibre Company Merger

As previously announced in these columns Fibre Specialty Mfg. Co., Division of National Vulcanized Fiber Co., Kennett Square, Pa., has purchased the Rogers Fibre Co., Kennebunk, Me., Boston, Mass., and Spartanburg, S. C., manufacturers of Leatheroid products. Equipment and offices of the Rogers company have been moved to Kennett Square where their line will be manufactured in conjunction with Steel-Klad and Kennett brands of the Fibre Specialty Mfg. Co.

The same products will be manufactured, designs and specifications will be maintained and distribution will be through the same channels as in the past. Leon B. Rogers is associated under the new plan of operation at the Kennett Square plant, and will continue to give the trade service from that point. John Rogers, formerly manager of the Rogers' Spartanburg plant, will continue to make his headquarters at that place.

H. C. Graton to Celebrate 100th Birthday

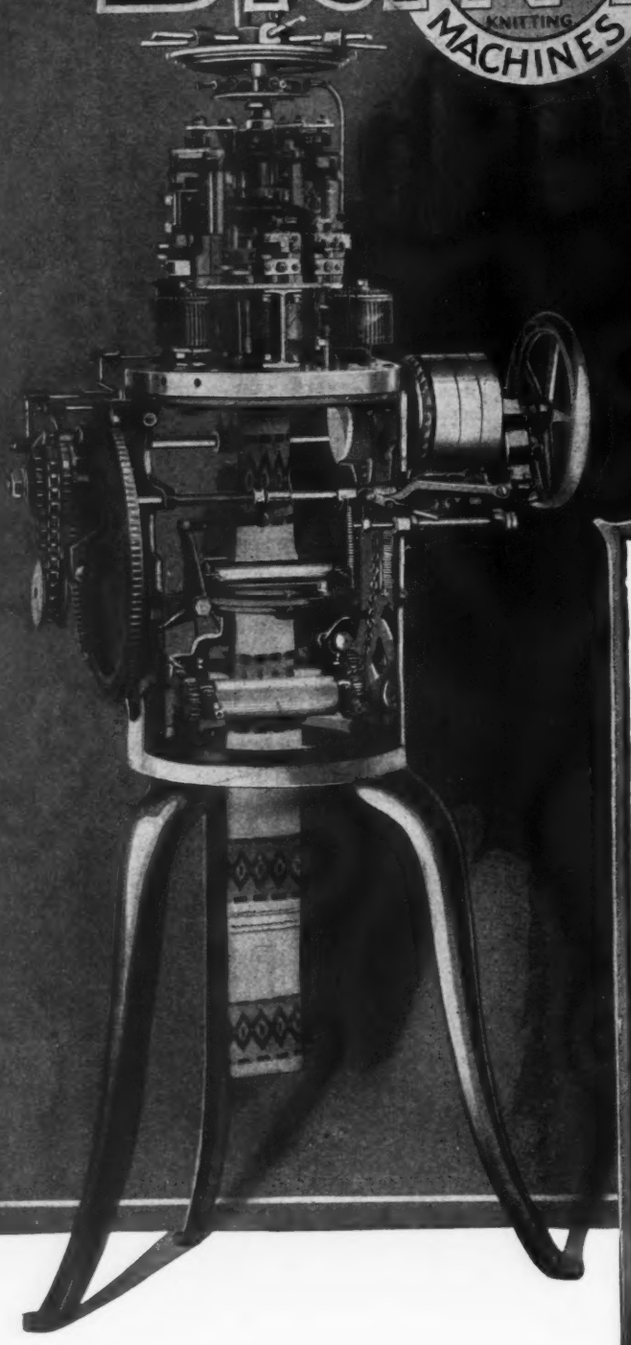
On July 10, Henry Clay Graton, the still living founder of the leather belting firm Graton & Knight, Worcester, Mass., will celebrate his 100th birthday. He was named after Henry Clay, who was traveling in Massachusetts at the time of Mr. Graton's birth, and whose speeches made a great impression on the Graton parents.

Mr. Graton was born in 1830 on a farm in Leicester, Mass., where he spent his early youth, and where long hard hours of work built a physique which carried him through a century. At the age of 21, he and a friend of his, Joseph A. Knight, decided to go into the leather business. In a two-room shop which measured 20x60 ft., the Graton & Knight enterprise was started. Between them, the two youths raised $800, which formed their entire capital at the start. The day of the machine age was rapidly drawing near, and Mr. Graton was one of the first to realize and appreciate its opportunities. Factories were being built everywhere and the need of leather belting was already apparent in the first half of the last century.

Not many live to enjoy a 100th birthday and it is all the more remarkable when

BRINTON

CIRCULAR KNITTING MACHINES



Brinton Knitting Machines present a great diversity of possibilities. With Brintons, new styles, patterns and effects can be placed in production economically with the least possible loss of time.

Let us send you full information.

H. BRINTON COMPANY

3700 Kensington Avenue

Philadelphia, Pa.

FOREIGN AGENTS

Great Britain and the Continent: Wildt & Co., Ltd., Leicester, Eng.

Australia: J. H. Butter & Co., Sydney, Melbourne.

South America: M. Buchsbaum, Calle Alsina 1814, Buenos Aires, Argentine Republic.

China and Japan: Elbrook, Inc., 50 Peking Road, Shanghai, China

Officials of the Watson-Williams Mfg. Co.

it is considered that Mr. Graton has seen and lived in the same town with men who fought at Bunker Hill and who served in the armies under Washington. Among his early customers was William Crompton, maker of the first American power loom.

Mr. Graton has seen the whole panorama of American business unfold before his eyes along with the development of his own company. He, the first salesman of his company 80 years ago, recently opened a sales conference attended by representatives from every part of the country.

Watson-Williams Mfg. Co. Formed

The L. S. Watson Mfg. Co., Leicester, Mass., and the J. H. Williams Co., Millbury, Mass., have been united as the Watson-Williams Mfg. Co., with executive offices at Leicester, Mass., and plants at Millbury, Mass., and Marlow, N. H. The new company will continue the manufacture of shuttles, heddles, heddle frames, hand cards, stripper cards and dog brushes.

The J. H. Williams Co. is celebrating its 100th anniversary this year. The L. S. Watson Mfg. Co. was founded in 1842 by Lory S. Watson at Leicester, Mass. In 1911 it took over the Gibbs Heddle Co., Clinton, Mass., which was moved to Leicester. The Williams Co. was brought from Utica, N. Y., and absorbed the H. W. Hakes Co., Millbury, which was controlled by the Watsons.

Walter C. Watson becomes president of the new concern. During the last few years, three sons of Walter C. Watson, the fourth generation, have entered the business and at the present time hold executive positions. One son, Wilbur L. Watson, connected with the Leicester plant for some years as assistant treasurer and manager, now becomes treasurer of the Watson-Williams Mfg. Co. Another son, Clifton E. Watson, formerly vice-president and manager of the J. H. Williams Co., will be general manager in charge of all three plants. The youngest son, Hubert J. Watson, who has just recently entered the firm, becomes assistant general manager and also assistant treasurer.

Wagner Electric Adds to Philadelphia Sales Force

Wagner Electric Corp. announces the addition of Herbert Hoover to its Philadelphia branch sales office. Mr. Hoover received his electrical engineering training at the University of Oklahoma. After serving in the army he entered the employ of the Empire District Electric Co., Joplin, Mo., in 1919. In 1923 he became general distribution engineer for the Potomac Electric Power Co.

Scott & Williams Builds New Plant at Laconia, N. H.

By Charles D. White

Lockwood Greene Engineers, Inc.

SCOTT & WILLIAMS, Inc., of New York, manufacturer of knitting machinery since 1865, with plants at Lakeport and Laconia, N. H., is now constructing an additional large manufacturing building at its Laconia plant. Demolition of existing buildings of the old type was commenced this year as early as weather conditions permitted, and driving of piles for foundations started at once. It is expected that the new unit will be ready before fall.

The building is 63x475 ft. and is four stories high. It is of reinforced concrete frame with flat-slab system for floors and roof. This gives a flat ceiling with no beams to cut off light or circulation of air, and presents no interference to shafting and piping.

Lighting and Ventilation

Steel sash with the latest type of ventilators form the largest portion of the exterior wall surfaces. The maximum amount of light and air is obtained for all parts of the building on all floors by the elimination of ceiling beams and by setting window heads at the ceiling line. All ceilings have special inserts for bolts cast into the concrete at regular intervals, so that shafting, pipes, etc., may be readily installed.

Owing to the nature of the soil and the proximity of a large brook, the foundations of the building are carried on groups of steel-shell concrete piles with an average length of 25 ft.; over 500 piles are used for this purpose. All window sills are of concrete, cast in place with an integral waterproofing over a waterproof cutoff to prevent any water entering the wall at these points.

The roof, which is of tar and gravel over concrete, is ramped up to top of parapet to eliminate the troublesome joint at junction of parapet wall and roof. Through flashings are built into the walls in all places where their omission would permit the penetration into the building of water absorbed by the walls.

Fireproof Construction

The main stairs are of reinforced concrete construction with safety treads cast in for a nosing. The stair shaft is of fireproof construction. Doors here are metal covered and equipped with devices which automatically close them in case of fire. Main stairs and toilets are housed in a tower, leaving floor space in the main building unobstructed. Heating is by steam supplied from the present central plant. The entire building is protected by an automatic sprinkler system, in which constant pressure is maintained by automatic pumps. It is also connected to the city supply.

A covered loading platform with truck space provides easy loading and unloading of materials and shipments, and a freight elevator of 2½ tons capacity serves all floors. The elevator is enclosed in a fireproof shaft. Fireproof doors which are equipped with electric safety locks are installed. The locks so regulate the doors that no door can be opened unless the car is at that landing and the car cannot be started unless all doors are closed.

Construction work has been awarded to Temple & Crane, of Boston, who built the original unit of the building last year. Piles are being installed by the Raymond Concrete Pile Co., and the freight elevator will be installed by the Otis Elevator Co. of Boston. Contracts for the building equipment, heating, lighting, and sprinklers will be let soon. Lockwood Greene Engineers, Inc., of Boston, were engaged for the engineering and architectural design of the building and the supervision of the construction.

New manufacturing building for Scott and Williams, Inc., at Laconia, N. H.

THE ELMORE CORPORATION
MERCERIZED
YARNS
Spindale
N.C.

MERCERIZED
Single and High Count 2-Ply
YARNS
Sewing and Looping
THREAD
Bleached, Dyed, Mercerized, Glazed

THE ELMORE CORPORATION
Spindale, N. C.

Sole Selling Agents
Cotton Products Company
Fidelity Philadelphia Trust Bldg., Philadelphia, Pa.

Branch Offices:
51 Arlington St., PAWTUCKET, R. I.
418 So. Franklin St., READING, PA.
James Bldg., CHATTANOOGA, TENN.
Adams Franklin Bldg., CHICAGO
Greensboro Bank Bldg., GREENSBORO, N. C.
Westaway Bldg., HAMILTON, ONT.
1st National Bank Bldg., AMSTERDAM, N. Y.
432 Fourth Ave., NEW YORK CITY

GROVES MILLS, Inc.
SUPER QUALITY
COTTON YARNS

GROVES BRAND

COMBED PEELER, 24s to 80s, single and plies
CONES, TUBES, SKEINS AND WARPS.
Samples and quotations promptly furnished.
SALES OFFICE:
225 FIFTH AVENUE
NEW YORK
MILLS AT GASTONIA, N. C.

QUALITY FIRST

American Thread Company
YARNS
JAMES AUSTIN & SON
260 West Broadway, New York
Selling Agents

Insulating Yarns a Specialty

T. J.
PORTER & SONS

YARNS

COTTON — RAYON
WORSTED — RAMIE
CAMEL HAIR — SPUN RAYON
MOHAIR — WOOL
ALPACA — LINEN

1600 ARCH STREET
PHILADELPHIA

Representing Leading Spinners of Every Type

NEW YORK — LOS ANGELES

JAMES E. MITCHELL
COMPANY

Cotton and Rayon

YARNS

Philadelphia — Boston

ROCKFISH MILLS
INCORPORATED
DIRECT SELLING SPINNERS
COTTON YARNS OF QUALITY

10's to 40's Single and Ply
Warps, Skeins, Tubes, Cones

Selling Offices
PHILADELPHIA, PA. 1035 Drexel Bldg. Lombard 5932
NEW YORK 51 Madison Ave. Ashland, 4342
PROVIDENCE, R. I., 55 Exchange Place Gaspee 2218

What did the Riverside and Dan River Cotton Mills say about...

FOXWELL GUIDERS?

Read, and you'll be convinced that you, too, should install Foxwell Guiders.

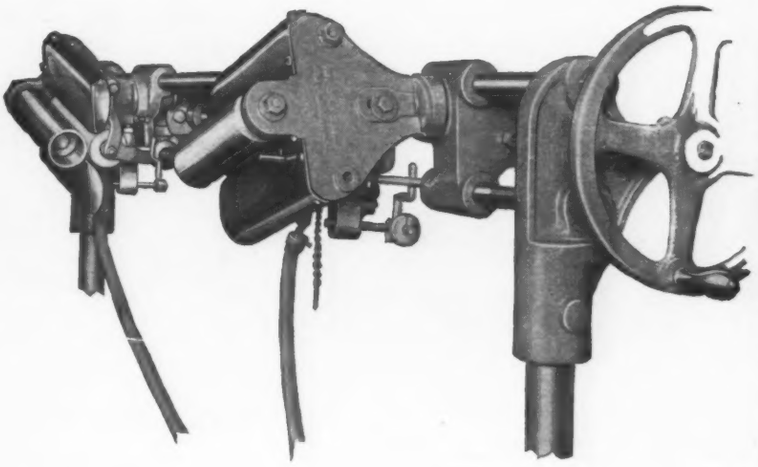
> *"Your slogan 'Better help that works for nothing and never becomes tired' expresses everything."*

There's a new price on Foxwell Guiders—the Guiders that work at all speeds. They never forget or become irregular like hand labor. They never have an off day or ask for a day off. We'll send you booklet.

Ask us for prices.

They feed goods in your form into any kind of a machine. They eliminate seconds and they save hand feeding.

The new lower price of Foxwell Guiders makes it cheaper to install them than to do without them.



H. W. BUTTERWORTH & SONS CO.

Established 1820

PHILADELPHIA, PA.

PLANTS at PHILADELPHIA and BETHAYRES, PA.

New England Office: **Turks Head Building, Providence, R. I.**

Southern Office: **Johnston Building Charlotte, N. C.**

In Canada: **W. J. Westaway Co., Hamilton, Ontario**

BUTTERWORTH *Finishing* MACHINERY

H. W. Butterworth & Sons Co.
Please send me complete information on Foxwell Guiders as advertised in *Textile World*.

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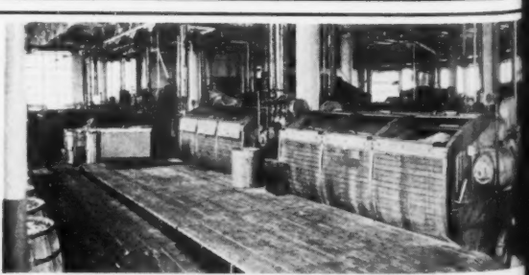
ANOTHE

Courtesy of the Holeproof Hosiery Company



Smith-Drum machines will be found in practic
every hosiery dye house in the country—and
of the more important concerns use them ex
sively. This can mean only one thing—that the
far superior to any other machines on the ma

HOLEPROOF HOSIERY

THE FAMOUS BRAND OF HOSIERY IN THE MANUFACTURE OF WHICH SMITH-DRUM MACHINES HAVE PLAYED A PART

"Holeproof" is one of the outstanding names in the field of hosiery. Advertising has played a part—so has management, selling—and manufacturing.

To Smith-Drum the success of this and other great hosiery companies is a matter of pride, for we realize that Smith-Drum Dyeing Machines have contributed a share.

Poor dyeing can spoil the finest advertising campaign ever conceived. On the other hand, good dyeing alone can not "make" a product—it is simply one of several essential factors.

Won't you let us remove "dyeing" from your list of worries? An executive of this company is at your service.

SMITH-DRUM & COMPANY, PHILADELPHIA, PA.

Builders of the Best **SMITH-DRUM** Since 1888

Destined to weave the MOHAWK *wide, seamless Axminsters*

Riding an overhead crane, the photographer "shoots" this unusual view. It shows the principal working parts of one of the Mohawk looms under construction.

You can see the majority of cams are in place on the cam shaft. The two large cams on either side of the center-girt are the ones that beat up the lay. On the extreme left is shown the right-hand back knife cam and let-off cams. The mechanism in the top center is part of the lifter motion which takes the strain off the tube frame when putting in the tufts. This mechanism is operated by the cam lever shown on the center cross-girt.

Crompton & Knowles Research Engineers have constantly improved these looms to operate at greater speed and produce better quality. . . Write for any information you desire on wide looms for woven floor coverings.

The fourth of a series featuring a Mohawk loom order in progress

CROMPTON & KNOWLES
WORCESTER, MASSACHUSETTS
A loom FOR *every* WOVEN FABRIC

See also CONSOLIDATED TEXTILE CATALOG

THE #40 UNIVERSAL WINDER

The new principles of construction embodied in the #40 machine are such as to give practically unlimited speed of operation so far as the structure of the machine is involved. In the practical use of the machine in mills, the determining factor regarding speed will rest upon the numbers and quality of yarn, and the proper allotment of spindles to the operator to give the greatest productive efficiency and economy of operation.

Reciprocating parts have been eliminated as in the use of these there is a definite economical speed beyond which there is excessive wear of machine parts, increasing the cost of upkeep and adding materially to the power required in operation.

ECONOMIES

Saving in power — saving in upkeep—increased production per spindle--increased durability — increased capacity of operator.

LEESONA

UNIVERSAL WINDING COMPANY

BOSTON

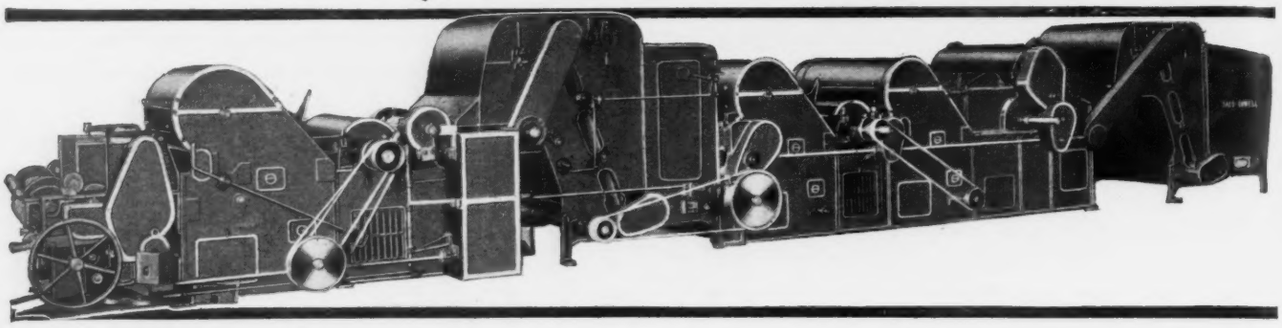
305

UNIVERSAL WINDERS

SACO-LOWELL

One-Process Picking

With Synchronized Control



BLENDED AT THE BALE BREAKER . . . . . .

STOCK FLOWS AUTOMATICALLY THROUGH ALL PICKING AND CLEANING OPERATIONS TO FINISHED LAPS

WITH Saco-Lowell One-Process Picking, the stock is blended in the Opening Room and flows automatically (under synchronized control) through all picking and cleaning operations to emerge as finished laps, ready for the cards.

Blending is performed at its logical place, — the Opening Room. Consequently, there is no need for lapping, and the handling of laps, at the finisher lapper. Substantial labor-saving is made by this automatic processing, and the elimination of lap blending has greatly increased the quality of product. Substantial increase in yarn strength is a foregone conclusion.

Under the sponsorship of Saco-Lowell, One Process Picking has proved a great boon to progressive mills. First in the field, Saco-Lowell One Process Picking has been radically improved by Saco-Lowell engineers. Why not let them tell you the story NOW and get your mill in line?

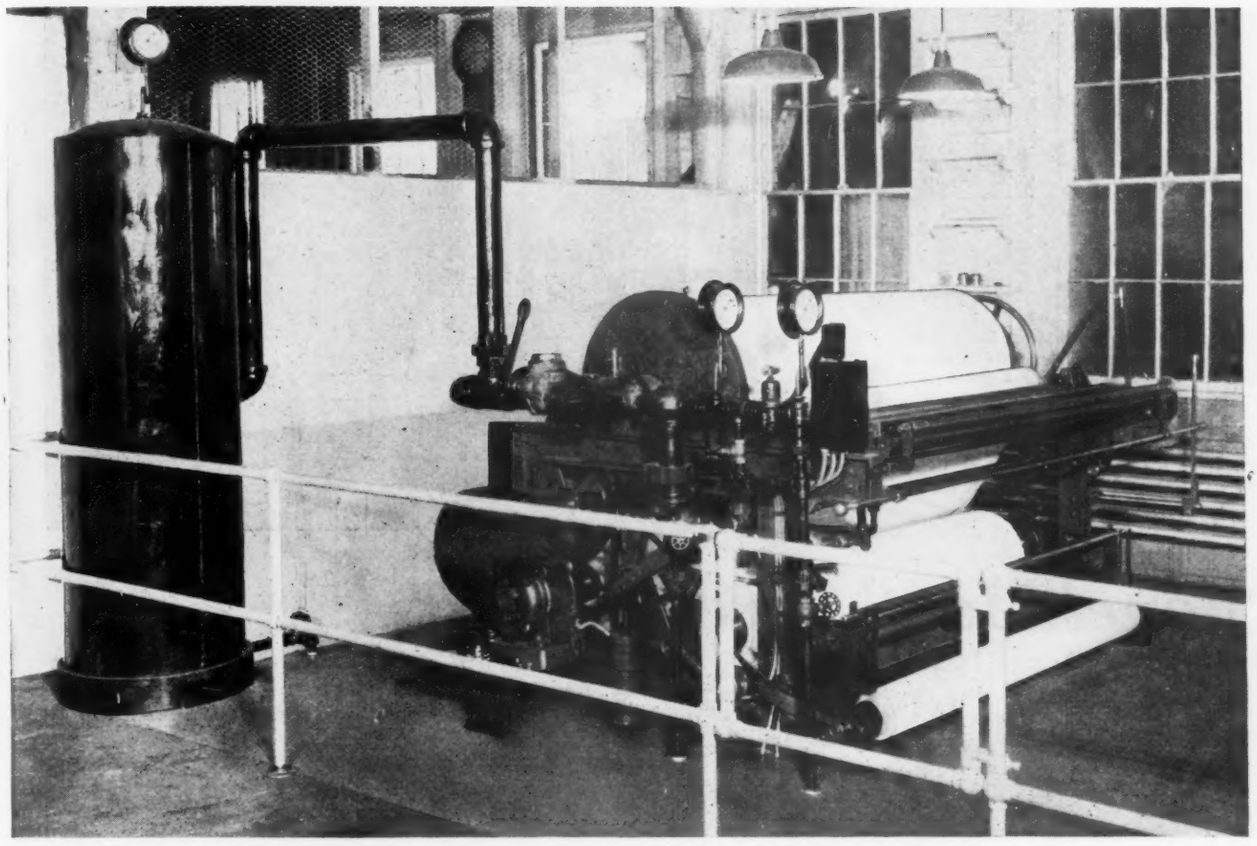
SACO-LOWELL

MANUFACTURERS OF TEXTILE MACHINERY

147 Milk St., BOSTON, MASS.

See Also CONSOLIDATED TEXTILE CATALOG

CHARLOTTE, N. C. SPARTANBURG, S. C. ATLANTA, GA.



Single Cylinder 72x24 Semi-Decater (This is the demonstration machine at our plant)

And now the "*Semi-Decated*" finish for Rayon and Real Silk fabrics

HERE is an interesting new development for finishers of Rayon and Real Silk fabrics . . . the "*Semi-decated*" finish. It greatly enriches the handle and appearance of many different types of goods at small operating expense and with a nominal outlay for machinery. It produces that full, silky feel that is so desirable in any finish.

For those interested in discovering the possibilities of this new finish, we are prepared to run samples on the demonstration machine at our plant (See cut). We can handle any width up to 68 inches and any yardage, but suggest that a yard or two of several different styles will serve the purpose for a starter.

We have always believed that this machine had great possibilities for finishers of Rayons and Realsilks. From the number of plants that have become interested, and from the actual orders received, we are now sure of it.

Why not send us samples?

PARKS & WOOLSON MACHINE CO. SPRINGFIELD VERMONT

Southern Representative
P. B. RAIFORD, Jr., CONCORD, N. C.

New York Office
1270 BROADWAY—Tel. PENN. 0360

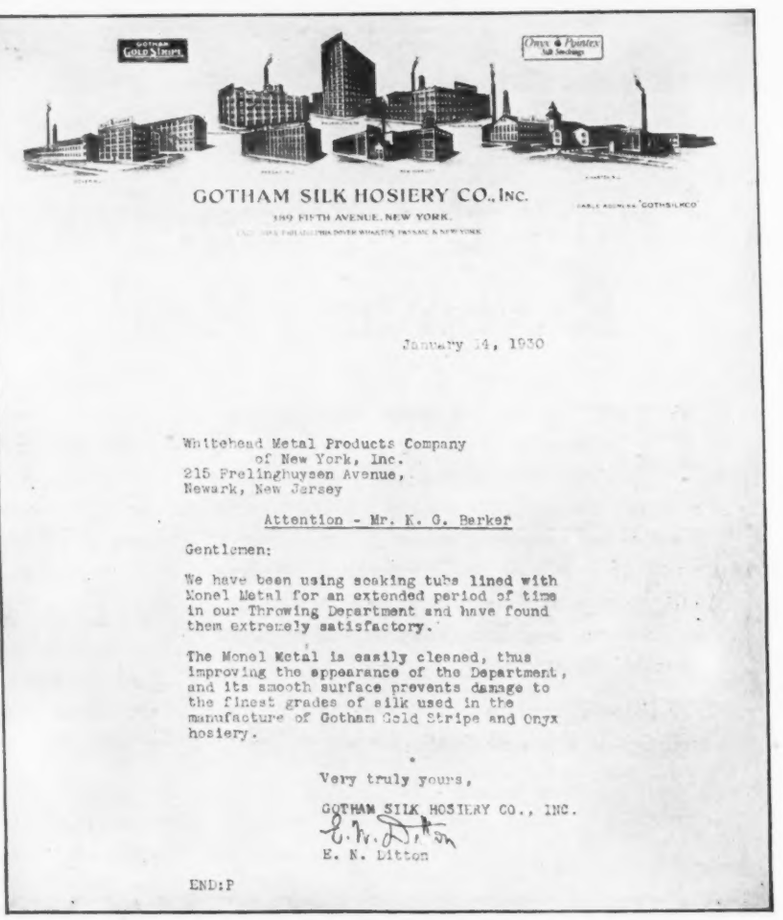
Over 50 different machines for finishing Woolens, Silks, Rayons, Cottons and Pile Fabrics

PROVED!

Some of the 30 Monel Metal lined silk soaking tubs in the throwing department of the Gotham Silk Hosiery Co., Inc., Wharton, N. J. These tanks and linings were manufactured by the G. WOOLFORD WOOD TANK MANUFACTURING CO., Darby, Pa.

Monel Metal saves labor... protects silk in Throwing Plants!

The fascinating story of Monel Metal — its properties and uses — is told in a new 2-reel motion picture film. Write for details of free distribution.



GOTHAM SILK HOSIERY CO., INC.
180 FIFTH AVENUE, NEW YORK.

January 14, 1930

Whitehead Metal Products Company
of New York, Inc.
215 Prelinghuysen Avenue,
Newark, New Jersey

Attention - Mr. K. G. Barker

Gentlemen:

We have been using soaking tubs lined with Monel Metal for an extended period of time in our Throwing Department and have found them extremely satisfactory.

The Monel Metal is easily cleaned, thus improving the appearance of the Department, and its smooth surface prevents damage to the finest grades of silk used in the manufacture of Gotham Gold Stripe and Onyx hosiery.

Very truly yours,

GOTHAM SILK HOSIERY CO., INC.

E. N. Ditton

END:F

Monel Metal is a registered trade mark applied to a technically controlled nickel-copper alloy of high nickel content. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.

MONEL METAL

THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL STREET, NEW YORK, N. Y.

ANNOUNCING

. . . *patent rights on*

Wissco NonStrip *Card Clothing*

THE fact that the Wickwire Spencer Steel Company was the originator of straight tooth card clothing for use in cylinders and top flats has been recognized by the granting of

United States Patent . . . No. 1759563
Great Britain Letters Patent No. 325347

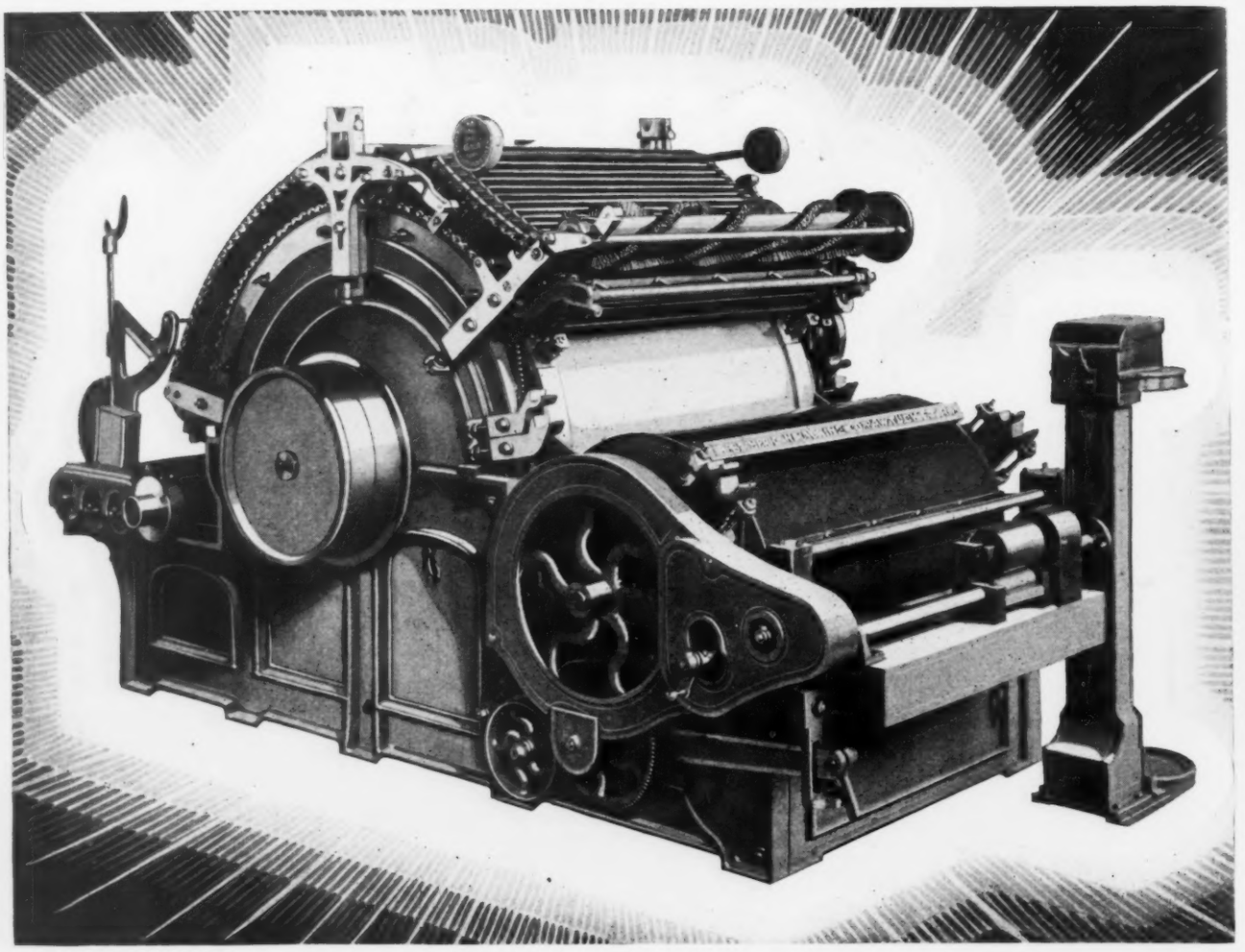
covering the use of straight teeth for these purposes.

We are naturally gratified at this recognition and assure you of the continuance of our intention to maintain our position in the front of the field.

\+ + +

WICKWIRE SPENCER STEEL COMPANY
41 East 42nd Street
New York City

WICKWIRE SPENCER
WIRE PRODUCTS



THE ACE OF CARDS

Points of Superiority

- Rigid Bend, mathematically correct at all stages of wear of the wire.
- Perfect concentricity of Flats to Cylinder. Cylinder Pedestals are adjustable.
- Arrangement for adjusting Flats whereby accuracy to the thousandth part of an inch is obtained.
- Better quality of yarn made from the same cotton, or equally good yarn made from cheaper cotton.
- Patent method of securing Clothing to the Flats, neatest, cleanest and most effective.
- Patent Top Flat Grinding Arrangement for grinding from the working seating of the Flats.
- Patent Flat Stripping Motion which insures perfect stripping without damage to the Clothing on the Flats.
- Back Bends or Circles for supporting Flats and preventing sagging and stretching of chains.

Performance figures, specifications and names of users gladly sent upon request.

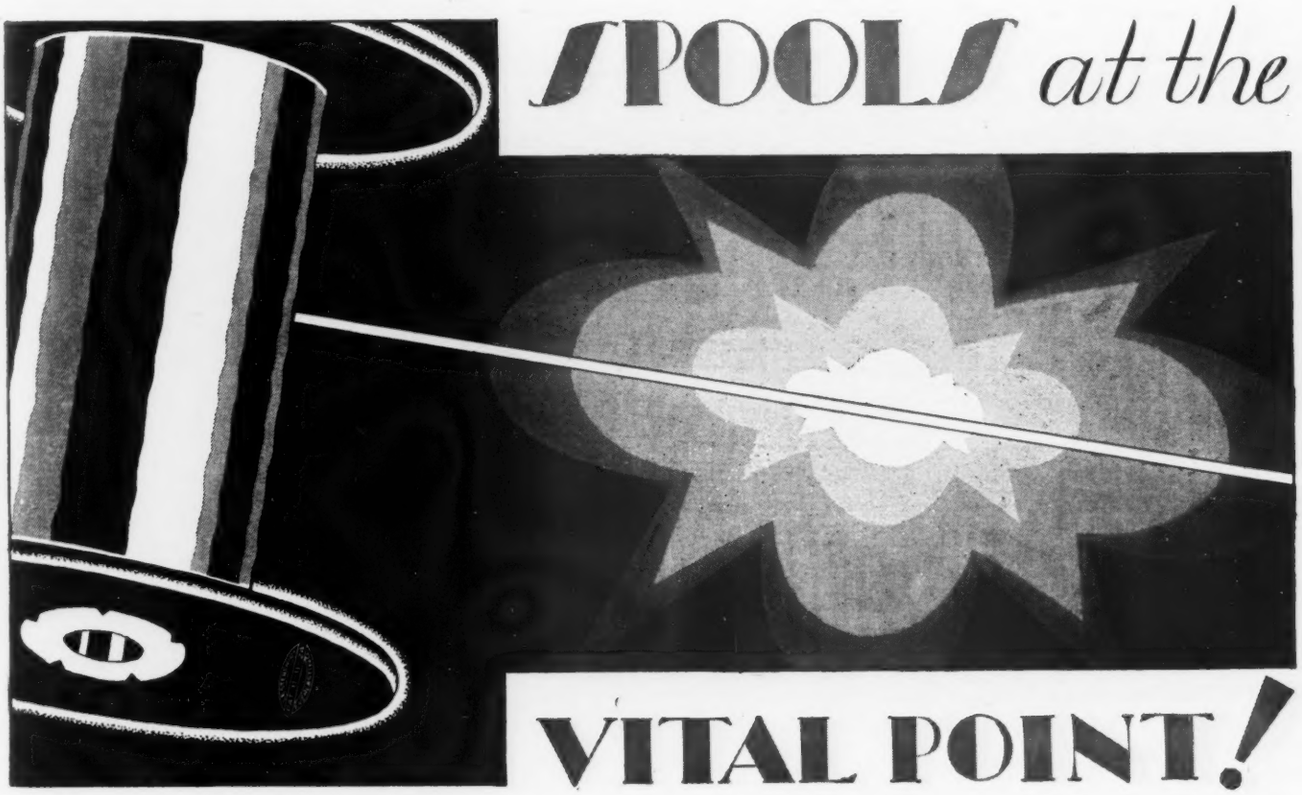
H & B AMERICAN MACHINE CO.

PAWTUCKET, R. I.

Southern Office: 814-816 ATLANTA TRUST CO. BLDG., ATLANTA, GA.

BUILDERS OF COTTON PREPARATORY AND SPINNING MACHINERY

PROTECT YOUR PRODUCTION *by installing* LESTERSHIRE *SPOOLS at the*



VITAL POINT!

THE source of breaks and weak spots in the finished fabric is often discovered to be faulty spooling of the yarn. Here is a vital point in production, for if yarn unwinds in jerks these breaks and thin spots are inevitable in the finished production.

The use of Lestershire Spools eliminates trouble at the loom. It is a question of spool construction . . . of remarkable accuracy in the designing and building of Lestershires.

Lestershires, therefore, are true-running spools. The yarn winds on evenly. And it unwinds evenly, steadily, at uniform tension. "Thinning" the yarn through stretching, or actually breaking it, is avoided.

Mills equipped with Lestershires earn an extra dividend from spooling. It consists of better quality in fabrics, and a saving of time and trouble.

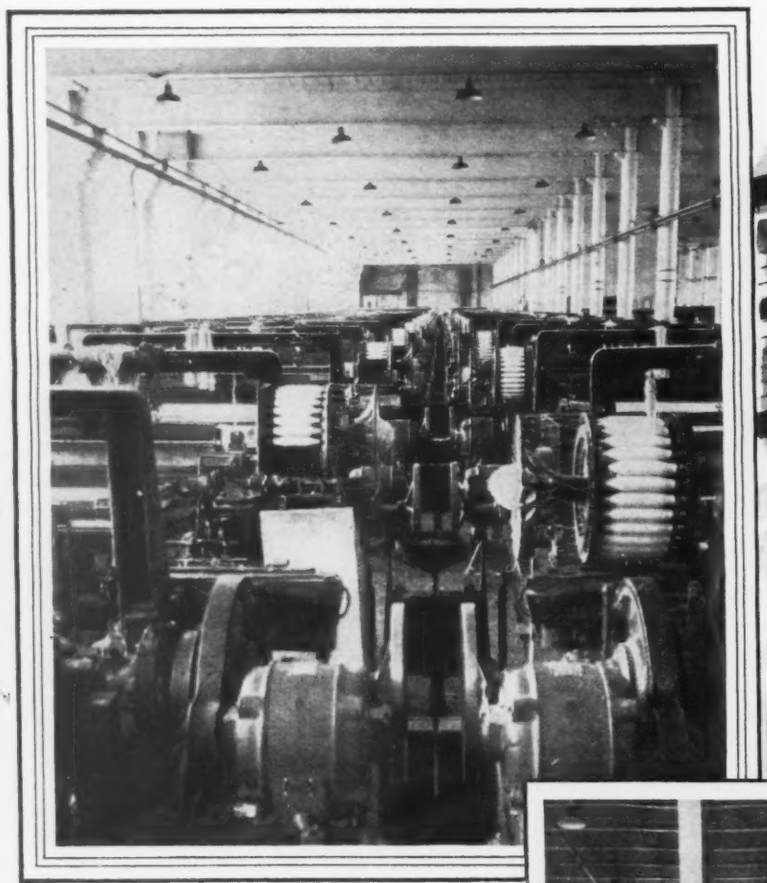
Satisfaction Guaranteed

LESTERSHIRE
TRADE FIBRE SPOOLS MARK
SPOOL & MFG. CO.

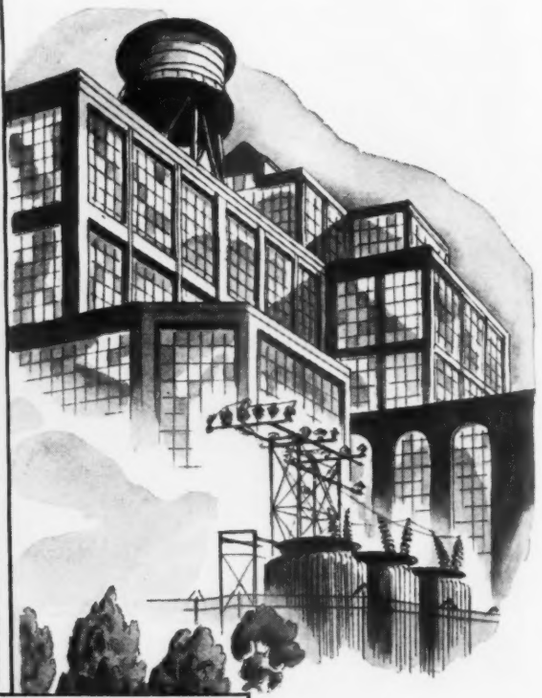
Box 3
Johnson City
New York

Southern Office
519 Johnston Bldg.,
Charlotte, N. C.

FROM THE LOOM



Each of the looms in this weave room of an Alabama textile mill is driven by a Westinghouse Individual Loom Motor.



These slubbers are driven by Westinghouse Textile Motors with the soft and easy starting effort that minimizesbrokenends.

Motor maintenance is greatly reduced by Sealed Sleeve bearings which cut down frequency of oiling.

See also CONSOLIDATED TEXTILE CATALOG

TO THE LIGHT ON THE COUNTER

Westinghouse serves you . . .

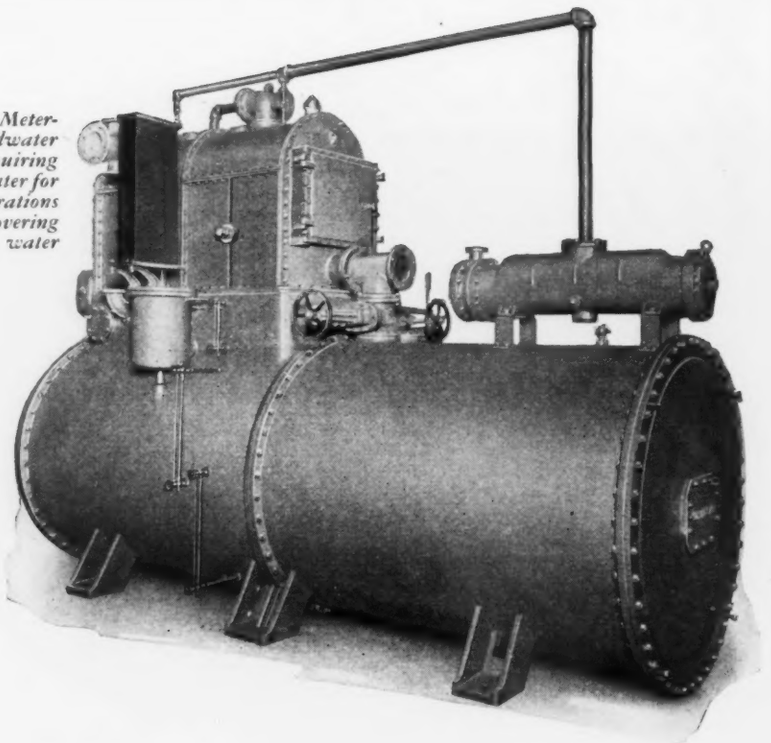
AT cotton-gin, spinning mill or dyeing plant, the accurately controlled power of electricity performs its work willingly and well. And throughout every step, down to the brilliant lamp that displays dainty dyestuffs in their true sunlight shades, Westinghouse blankets the electrical needs of the textile industry. With some 320,000 different products, this organization is in a position to supply you the best of everything electrical.

Ample warehouses — there is one near your headquarters—make it unnecessary for you to carry large stocks of electrical equipment and supplies, such as motors, safety switches, panelboards, lamps, reflectors and the like. You may be assured of prompt delivery on every item. Westinghouse engineering counsel, respected throughout the industry for its practical applications of research to industrial problems, offers you the benefit of its accumulated store of technical knowledge. Westinghouse service shops, strategically located, stand ready to meet every electrical emergency.

A trained Westinghouse specialist, intimately acquainted with your industry's varied production requirements, is no farther away than your nearest telephone.

Service, prompt and efficient, by a coast-to-coast chain of well-equipped shops

Westinghouse



Worthington Deaerating Metering Storage Type Feedwater Heater, for the plant requiring large quantities of hot water for boilers and process operations . . . one of several types covering the entire range of hot water requirements

Here's a feedwater heater

. . . that will put Worthington's experience *to work in your plant*

BOILER feedwater . . . process water . . . delivered at high temperature, day-in and day-out without interruption, at the *lowest possible cost.*

That is the kind of performance that Worthington has built into the new Type N Stationary Feedwater Heater . . . the result of Worthington's engineering skill and long experience in the building of heat transfer equipment.

The unit shown here represents the most advanced development in heaters . . . embodying deaerating, metering and storage features. With this equipment, corrosive oxygen ceases to be a problem . . . scale forming ingredients are largely precipitated and removed . . . delivery of water is accurately measured and recorded.

Worthington Feedwater Heaters are built to meet any requirement of capacity or type of service . . . and Worthington engineers are ready to cooperate in a study of your individual needs.

Bulletin W-210-B1 describes this equipment. *May we send you a copy?*

WORTHINGTON

PUMPS
COMPRESSORS *Stationary and Portable*
CONDENSERS and Auxiliaries
FEEDWATER HEATERS
GAS ENGINES
DIESEL ENGINES
WATER, OIL and GASOLINE METERS
MULTI-V-DRIVES
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Works: HARRISON, N. J. CINCINNATI, OHIO BUFFALO, N.Y. HOLYOKE, MASS.
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When you buy Insulation . . . .

do you want many "Sales Talks" or one expert's advice?

TODAY there is one headquarters—one central source for the finest in insulation and insulating methods—to which you can turn for the complete solution of all your problems involving fuel conservation and temperature control through insulation. That headquarters is Johns-Manville.

When you call in a J-M Engineer he is thoroughly trained to grasp your problems or needs quickly. His idea is not to "sell" you any particular type of insulation in preference to any other but to give you expert advice in the selection of the right insulation that will prove most satisfactory and will save money for you. He represents an organization that has been the leading authority on industrial insulation for more than half a century. His recommendations to you are based on this unequalled and specialized experience. He is able to offer you highly efficient insulation in ANY form and combination — block, brick, cement or filler — to cover every temperature condition from the lowest to the highest.

The J-M Representative not only brings to your particular problems an engineering experience and understanding that should be helpful to you, but his statement of your needs enables us to set our whole organization to work to solve your requirements—intelligently and without waste of time.

JM PRODUCT

Johns-Manville

INDUSTRIAL INSULATIONS

SUPEREX, SIL-O-CEL, 85% MAGNESIA, SPONGE FELT, ROCK CORK

For all temperatures from 400° F. below zero to the highest industrial temperatures

Address JOHNS-MANVILLE
At nearest office listed below
New York Chicago Cleveland San Francisco Toronto
(*Offices in all large cities*)
Please have a J-M Engineer call to discuss Insulation in our plant.

Name.....

I-33-0

Address.....

TO cut down upkeep use the wood that *fights* rot and acid

REPAIR BILLS are out on tanks, vats, sidewalls, roofing—anywhere, in short, if the structures are built of Tidewater Red Cypress (Coast Type).

For this rugged wood contains a natural store of "cypressene"—an antiseptic agent that prevents decay. Moisture and extreme temperatures, therefore, waste their efforts on the Wood Eternal.

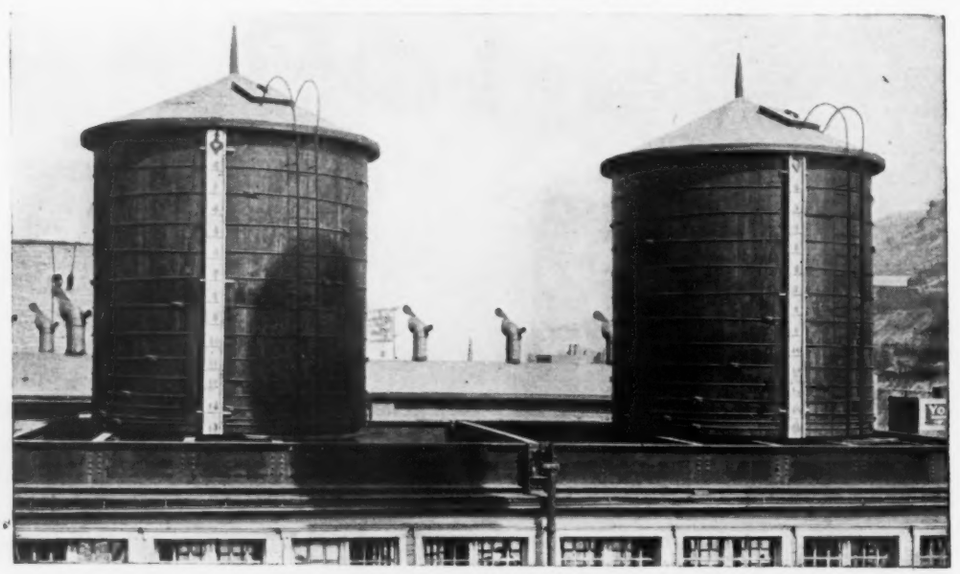
Tidewater Red Cypress also resists acid. Chemically inert, it offers absolute protection even to the finest fabrics.

No wonder more textile men every year are finding this lumber to be the most economical building material they can employ!

On your next structures, specify Tidewater Red Cypress. Its easy workability saves in labor. Its rough surface serves equally long, whether painted or left in its natural state.

For complete data and technical information, write to the Southern Cypress Manufacturers' Association, Jacksonville, Florida. If your dealer is not stocked with Tidewater Red Cypress, he can get it for you quickly—or you can write direct to any of the Association Mills listed below.

Built of Tidewater Red Cypress, these Hauser-Stander tanks should never demand a dollar's worth of repairs from The Hardie Bros. Co., Pittsburgh, Pa.



TIDEWATER RED CYPRESS

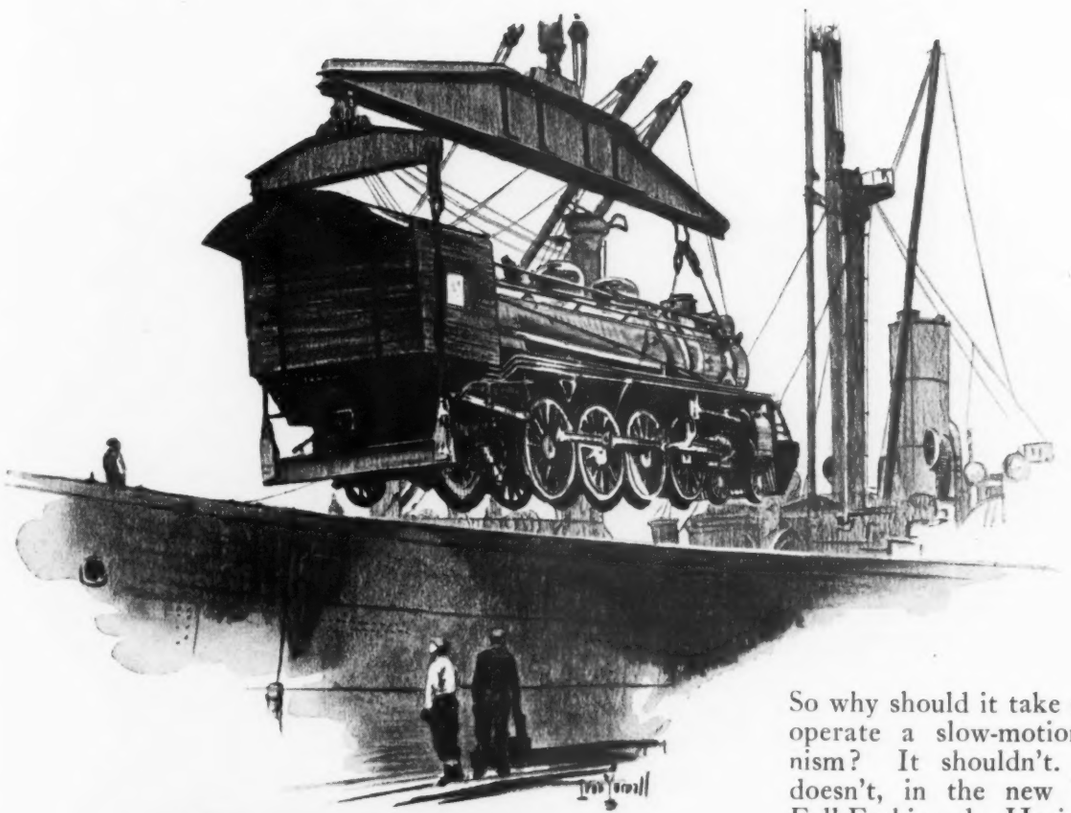
(COAST TYPE)

THE WOOD ETERNAL

This advertisement is published by the following members of the Southern Cypress Manufacturers' Association, Jacksonville, Fla.:

Big Salkehatchie Cypress Co., Varnville, S. C.
Burton-Swartz Cypress Co., Perry, Fla.
Cummer Cypress Co., Jacksonville, Fla.
Everglade Cypress Co., Loughman, Fla.
Reynolds Bros. Lumber Co., Albany, Ga.
Wilson Cypress Co., Palatka, Fla.

It *doesn't take* muscle *to lift a locomotive*



So why should it take muscle to operate a slow-motion mechanism? It shouldn't. And it doesn't, in the new Wildman Full-Fashioned Hosiery Machine. A child could operate this new mechanism.

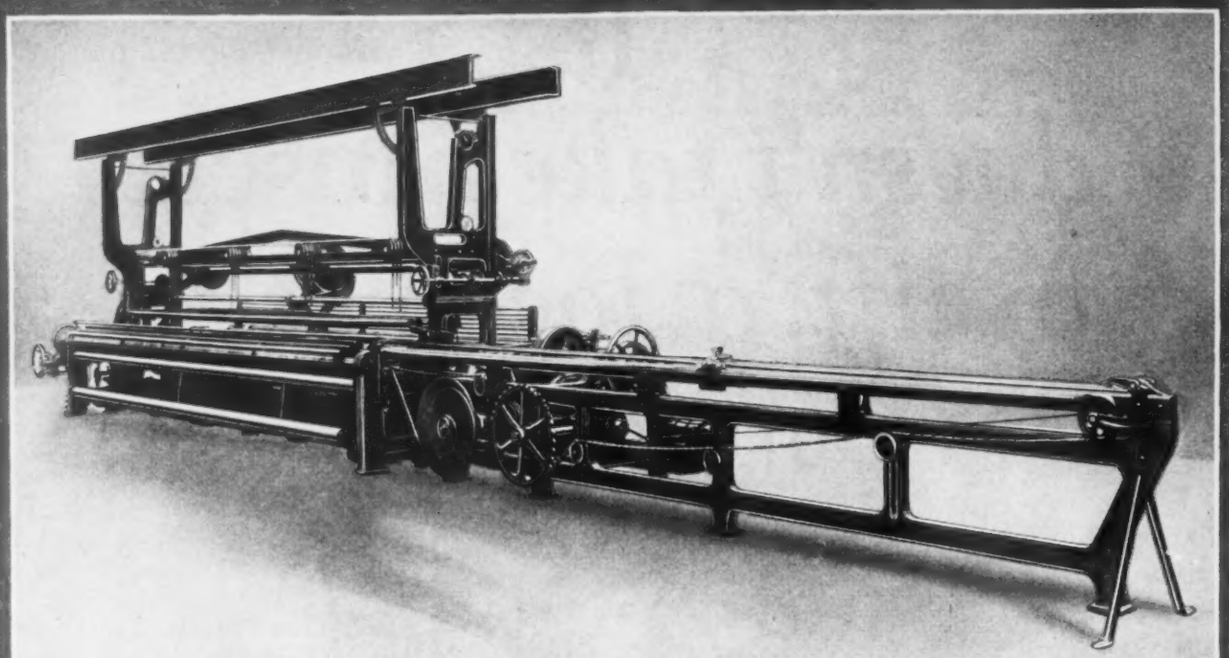
This is one of many interesting improvements incorporated in the new Wildman Machine.

Write for further information.

WILDMAN MFG. CO.
Full-Fashioned Division
Norristown, Pa.

WILDMAN
THE WORLD'S STANDARD

WILDMAN
FULL-FASHIONED HOSIERY MACHINE



MERTENS *Ball-Bearing* WILTON LOOMS

Built up to 26/4 width

The exceptionally sturdy construction of these looms assures a remarkable production service and a capacity to stand up under the stresses and strains of long, continuous and heavy operating schedules.

While these looms will be built to embody special features required by your particular conditions and ideas, yet prices are attractive and in a most favorable proportion to the productivity of these looms. Mertens Ball-Bearing Wilton Looms offer quicker and better returns on your loom investments.

Model MPL is built for 10½-11 wires per inch. Model MPS permits up to 14 wires per inch.

You will benefit by cooperating with us in matters of design, construction and the fulfillment of your own special ideas.

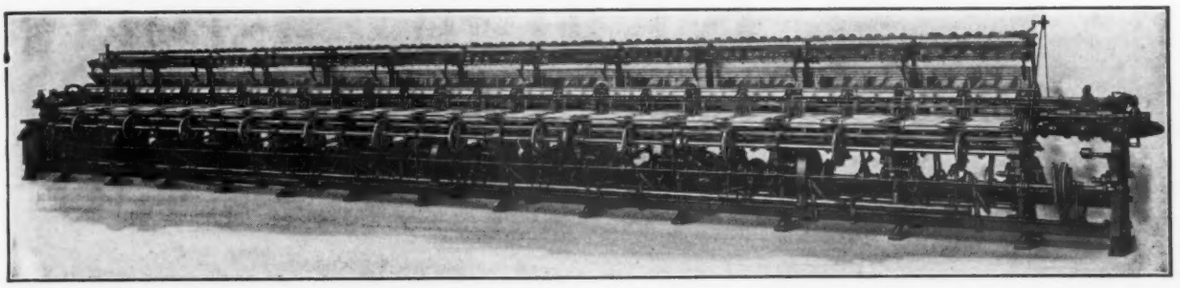
Our wide experience in pile fabric construction is entirely at your disposal.

J. J. KREHBIEL

381 Fourth Avenue
NEW YORK

KREHBIEL

TEXTILE MACHINERY



24 SECTION LEGGER

Your operators are easily trained on Reading machines and soon reach maximum production of firsts

For instance: A new mill started operation with our 24 section Reading machines less than 8 months ago. Today these machines are operated by newly-trained knitters in two shifts producing from fourteen to sixteen dozen pairs per machine per shift . . . an advantage of great importance.

TEXTILE MACHINE WORKS

READING, PA., U. S. A.

The **"READING"**

Full-Fashioned Knitting Machine

RICH in History . . . POOR in Efficiency

Primitive dyeing methods may produce beautiful fabrics . . . but modern industry demands efficiency also.

Let du Pont technical service help you modernize dyehouse methods

MORE progress has been made in wool-dyeing methods and machinery during the past twenty years than in all the years since this was a picture of an up-to-date dyehouse.

If your own dyehouse was planned before this new knowledge was current, it may be time for a renovation. For, as progress has swept through American woolen mills, not all departments have benefited equally. In many mills the styling, weaving, and finishing processes have advanced beyond dyehouse operation.

As a part of the regular service to woolen mills, du Pont maintains a staff of trained men, familiar with modern dyehouse methods and the latest developments in the use and preparation of wool dyes.

If your dyehouse is not producing the sales advantages and manufacturing economies you have a right to expect . . . if you need better color work, surer dyeing results, and generally more efficient dyehouse operation . . . write for a du Pont technical service man. He will be glad to help you . . . without obligation.

DU PONT DYESTUFFS
REG. U.S. PAT. OFF.

Sales Offices in Boston, Mass.; Charlotte, N. C.; Chicago, Ill.; New York, N. Y.; Philadelphia, Pa.; Providence, R. I.; and San Francisco, Cal. *Represented in Canada by* Canadian Industries, Limited, Heavy Chemicals Division, Sterling Tower Building, Toronto, Ontario, Canada.

E. I. DU PONT DE NEMOURS & COMPANY, INC., DYESTUFFS DEPARTMENT, WILMINGTON, DEL.

DU PONT WOOL DYES

Loveliness

The Loveliness of RAYON garments is increased by fine finish

WOMEN like lovely things, a trait clearly demonstrated in the selection of undergarments. So Rayon, Bemberg, Celanese or other synthetic fibres—with correspondingly beautiful seaming and stitching—is given preference.

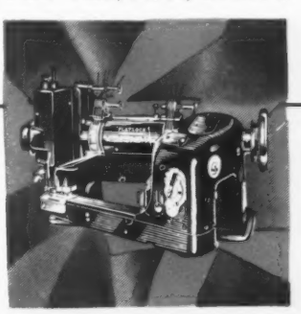
The Flatlock Machine might have been developed particularly for Rayon, so apt is this seam for daintiness and charm. It completes the ensemble of loveliness which experienced manufacturers know is in greatest demand.

Of course, the Flatlock Seam is positively flat. That fact however is only part of its appeal. It is practical merchandising to underwrite the popularity of your undergarments with the Flatlock—*The Seam that sells the garment.*

WILLCOX & GIBBS SEWING MACHINE CO.
658 B'way, New York, N.Y., U.S.A.

Don't handicap production . . . use genuine W & G Needles.

WILLCOX & GIBBS



Write our Home Office for samples made on the Flatlock, or submit your own fabrics for sample purposes. Sole United States and Canadian Agents for Cornely and Untart Embroidery Machines.

FASHION steps forth in the newest smart stocking . . . no seam on the graceful leg or small trim ankle . . . no seam under the smooth snug foot or on the narrowed fitted "Gussetoe."

A stocking of exquisite sheer . . . shaped and fitted in the knitting . . . always elastic . . . sleekly smooth. The stocking from the new Model K machine.

No seam to twist or mar the leg's sheer shapeliness.

The "Gussetoe"... narrowed and formed ... the smooth foot ... with no seam or ridge.

Established 1805

SCOTT & WILLIAMS

Incorporated

360 Broadway
New York, N.Y.

Which shall it be—

softness *or* **harshness** of fibres?
sweet *or* **unpleasant** odor in goods?
unspotted *or* **spotted** fabrics?
economy *or* **waste of time** in processing?
low *or* **high** percentage of re-dyes?

The answer to each of these questions may easily lie in the care with which you select your soap.

Olive Olate Flakes assures you a greater factor of safety in every processing operation. It has advantages not found in other textile soaps. One of the most important of these is its unusually low titre.

Yet Olate is no more expensive than other soaps, especially when you consider the production economies and better finishing results its use assures.

Ask the Procter & Gamble salesman to tell you the interesting story of Olive Olate.

Procter & Gamble

Cincinnati, Ohio

G O O D S O A P I S G O O D B U S I N E S S